

REACH

#### **Certificate of RoHS Compliance**

Based on the information available to us from our suppliers, and to the best of Alliance's knowledge, we hereby certify that the materials listed below are RoHS compliant and meet the requirements of EU RoHS Directive 2011/65/EU, and do not contain the substances listed in the tables below in concentrations exceeding the Maximum Concentration Value (MCV).

#### **Certificate of REACH Compliance**

Based on the information available to us from our suppliers, and to the best of Alliance's knowledge, we hereby certify that the materials listed below are REACH compliant and meet the requirements of REACH ECHA 20/06/2013, and do not contain the Substances Of Very High Concern (SVHC) listed in the tables below per ECHA regulations of (EC) No.1907/2006

> Page 2: Sintered NdFeB No Coating Page 8: Sintered NdFeB Passivated Page 14: Sintered NdFeB w/ Ni-Cu-Ni Page 20: Sintered NdFeB w/ Zn Plated

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#### Alliance LLC

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Report No. RLSHF001369680001

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Material: Uncoated Sintered NeFeB

Sample Name	No Coating NdFeB			
Sample Received Date	Feb.16,2013			
Testing Period	Feb.16,2013 to Feb.20,20	13		
Fest Requested	As specified by client, to s under Regulation(EC) No	ccreen the 57 substances of 1907/2006 of REACH in t	very high concern(SVHC he submitted sample(s).	)
Test Method	Please refer to the following	ng page(s).		
Test Result(s)	Please refer to the following	ng page(s).		
Summary	According to the analytica are all less than 0.1%(w/w	l results, concentrations of ) in the submitted sample(	57 SVHC substances s).	
Tested by Verr	va chen.	Reviewed by	ey Zoong	
Approved by	ry Su <b>(CT</b>	Date	Feb.20,2013	
	Joy Su			
Senior Labo	oratory Manager		No. 92402474	
			INO. 854024/4	



Report No. RLSHF001369680001 Test Result(s)

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No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
1	Cobalt dichloride*	7646-79-9	231-589-4	N.D.	0.01%
2	Diarsenic pentaoxide*	1303-28-2	215-116-9	N.D.	0.01%
3	Diarsenic trioxide*	1327-53-3	215-481-4	N.D.	0.01%
4	Sodium dichromate*	7789-12-0/ 10588-01-9	234-190-3	N.D.	0.01%
5	Lead hydrogen arsenate*	7784-40-9	232-064-2	N.D.	0.01%
6	Triethyl arsenate*	15606-95-8	427-700-2	N.D.	0.01%
7	<sup>©</sup> Lead chromate	7758-97-6	231-846-0	N.D.	0.05%
8	<sup>®</sup> Lead chromate molybdate sulphate red (C.I. Pigment Red 104)***	12656-85-8	235-759-9	N.D.	0.05%
9	<sup>®</sup> Lead sulfochromate yellow (C.I. Pigment Yellow 34)***	1344-37-2	215-693-7	N.D.	0.05%
10	®	10043-35-3	233-139-2	ND	0.010/
10	Boric acid	11113-50-1	234-343-4	N.D.	0.01%
11	<sup>®</sup> Disodium tetraborate, anhydrous****	1330-43-4 12179-04-3 1303-96-4	215-540-4	N.D.	0.01%
12	<sup>®</sup> Tetraboron disodium heptaoxide, hydrate****	12267-73-1	235-541-3	N.D.	0.01%
13	Sodium chromate*	7775-11-3	231-889-5	N.D.	0.01%
14	Potassium chromate*	7789-00-6	232-140-5	N.D.	0.01%
15	Ammonium dichromate*	7789-09-5	232-143-1	N.D.	0.01%
16	Potassium dichromate*	7778-50-9	231-906-6	N.D.	0.01%
17	Cobalt(II) sulphate*	10124-43-3	233-334-2	N.D.	0.01%
18	Cobalt(II) dinitrate*	10141-05-6	233-402-1	N.D.	0.01%
19	Cobalt(II) carbonate*	513-79-1	208-169-4	N.D.	0.01%
20	Cobalt( II ) diacetate*	71-48-7	200-755-8	N.D.	0.01%
21	Chromium trioxide*	1333-82-0	215-607-8	N.D.	0.01%
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.	0.01%
23	Strontium chromate*	7789-06-2	232-142-6	N.D.	0.01%
24	Dichromium tris(chromate)*	24613-89-6	246-356-2	N.D.	0.01%
25	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	234-329-8	N.D.	0.01%

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### **Test Report**

Report No. RLSHF001369680001 Test Result(s)

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No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
26	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	N.D.	0.01%
27	<sup>(2)</sup> Aluminosilicate Refractory Ceramic Fibres (RCF) **	-	-	N.D.	0.05%
28	<sup>©</sup> Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) **	- 6	(B)	N.D.	0.05%
29	Arsenic acid*	7778-39-4	231-901-9	N.D.	0.01%
30	Calcium arsenate*	7778-44-1	231-904-5	N.D.	0.01%
31	Trilead diarsenate*	3687-31-8	222-979-5	N.D.	0.01%
32	Lead diazide*	13424-46-9	236-542-1	N.D.	0.01%
33	Lead 2,4,6-trinitro-m-phenylene dioxide (Lead styphnate)*	15245-44-0	239-290-0	N.D.	0.01%
34	Lead dipicrate*	6477-64-1	229-335-2	N.D.	0.01%
35	<sup>®</sup> Diboron trioxide	1303-86-2	215-125-8	N.D.	0.01%
36	Lead(II) bis methanesulfonate*	17570-76-2	401-750-5	N.D.	0.01%
37	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	N.D.	0.01%
38	Dioxobis(stearato)trilead*	12578-12-0	235-702-8	N.D.	0.01%
39	Lead dinitrate*	10099-74-8	233-245-9	N.D.	0.01%
40	Tetralead trioxide sulphate*	12202-17-4	235-380-9	N.D.	0.01%
41	Lead monoxide (lead oxide)*	1317-36-8	215-267-0	N.D.	0.01%
42	Lead titanium trioxide*	12060-00-3	235-038-9	N.D.	0.01%
43	Acetic acid, lead salt, basic*	51404-69-4	257-175-3	N.D.	0.01%
44	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1	N.D.	0.01%
45	Tetraethyllead*	78-00-2	201-075-4	N.D.	0.01%
46	[Phthalato(2-)]dioxotrilead*	69011-06-9	273-688-5	N.D.	0.01%
47	Lead cyanamidate*	20837-86-9	244-073-9	N.D.	0.01%
48	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped*	68784-75-8	272-271-5	N.D.	0.01%
49	Trilead dioxide phosphonate*	12141-20-7	235-252-2	N.D.	0.01%
50	Lead titanium zirconium oxide*	12626-81-2	235-727-4	N.D.	0.01%
51	Trilead bis(carbonate)dihydroxide*	1319-46-6	215-290-6	N.D.	0.01%
52	Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7	N.D.	0.01%
53	Orange lead (lead tetroxide)*	1314-41-6	215-235-6	N.D.	0.01%
54	Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1	N.D.	0.01%
55	Lead oxide sulfate*	12036-76-9	234-853-7	N.D.	0.01%
56	Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0	N.D.	0.01%
57	Silicic acid, lead salt*	11120-22-2	234-363-3	N.D.	0.01%

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Report No. RLSHF001369680001

#### **Test Method:**

Refer to US EPA3052:1996, US EPA 3050B:1996, US EPA 3060A:1996, BS EN 14582:2007 for sample pretreatment.

Analyzed by ICP-OES, SEM-EDS, UV-Vis and IC.

#### Tested Sample/Part Description Grey metal

#### Note:

- w/w = weight by weight; 0.1% = 1000 mg/kg = 1000 ppm1.
- 2 N.D. = Not Detected (<report limit)
- 3. \*: Concentration value of the substance by the conversion from the test 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).
- \*\*\*: C.I.: Colour Index 5.
- 6. \*\*\*\*\*: Concentration value of Disodium tetraborate, anhydrous and Tetraboron disodium heptaoxide, hydrate is evaluated by Disodium tetraborate, with no consider of the hydrate.
- 7. <sup>(2)</sup>: 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.
  - <sup>®</sup>: 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.



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#### Appendix:

- 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).
  - 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.
  - 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.

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Report No. RLSHF001369680006

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Material: Sintered NdFeB with Passivation

The following sample	e(s) and sample informa	tion was/were submitte	ed and identified by	/on the
behalf of the client				
Sample Name	Passivation NdFeB			
Sample Received Date	Feb.16,2013			
Testing Period	Feb.16,2013 to Feb.20	),2013		
Test Requested	As specified by client under Regulation(EC)	, to screen the 57 substar No 1907/2006 of REAC	nces of very high cor CH in the submitted s	acern(SVHC) sample(s).
Test Method	Please refer to the foll	owing page(s).		
Test Result(s)	Please refer to the foll	owing page(s).		
Summary	According to the anal	ytical results, concentrat	ions of 57 SVHC sub	ostances
	are all less than 0.1%	(w/w) in the submitted sa	ample(s).	
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	a cham		I wen Zat	119
Tested by Verr	ra chen.	Reviewed by	way Zda	ng
Tested by Verr	la chen.	Reviewed by	wrey Zda	ng
Tested by Verr	ha chen.	Reviewed by	way Zda	ng
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Tested by Verr Approved by	ra chen. Ny Su	Reviewed by Date	WREY ZAT Feb.20,2013	ng
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Tested by Verr Approved by Senior Labo Centre Testing International	A Chen. N Su Joy Su Joy Su bratory Manager al (Shenzhen) Co., Ltd.Shang	Reviewed by Date	Feb.20,2013 No. Jinqiao Road, Pudong D	NATURAL STATES AND

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Report No. RLSHF001369680006

Test Result(s)

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No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
1	Cobalt dichloride*	7646-79-9	231-589-4	N.D.	0.01%
2	Diarsenic pentaoxide*	1303-28-2	215-116-9	N.D.	0.01%
3	Diarsenic trioxide*	1327-53-3	215-481-4	N.D.	0.01%
4	Sodium dichromate*	7789-12-0/ 10588-01-9	234-190-3	N.D.	0.01%
5	Lead hydrogen arsenate*	7784-40-9	232-064-2	N.D.	0.01%
6	Triethyl arsenate*	15606-95-8	427-700-2	N.D.	0.01%
7	<sup>©</sup> Lead chromate	7758-97-6	231-846-0	N.D.	0.05%
8	<sup>22</sup> Lead chromate molybdate sulphate red (C.I. Pigment Red 104)***	12656-85-8	235-759-9	N.D.	0.05%
9	<sup>®</sup> Lead sulfochromate yellow (C.I. Pigment Yellow 34)***	1344-37-2	215-693-7	N.D.	0.05%
10	<sup>®</sup> Boric acid	10043-35-3 11113-50-1	233-139-2 234-343-4	N.D.	0.01%
11	<sup>®</sup> Disodium tetraborate, anhydrous*****	1330-43-4 12179-04-3 1303-96-4	215-540-4	N.D.	0.01%
12	<sup>®</sup> Tetraboron disodium heptaoxide, hydrate*****	12267-73-1	235-541-3	N.D.	0.01%
13	Sodium chromate*	7775-11-3	231-889-5	N.D.	0.01%
14	Potassium chromate*	7789-00-6	232-140-5	N.D.	0.01%
15	Ammonium dichromate*	7789-09-5	232-143-1	N.D.	0.01%
16	Potassium dichromate*	7778-50-9	231-906-6	N.D.	0.01%
17	Cobalt(II) sulphate*	10124-43-3	233-334-2	N.D.	0.01%
18	Cobalt(II) dinitrate*	10141-05-6	233-402-1	N.D.	0.01%
19	Cobalt(II) carbonate*	513-79-1	208-169-4	N.D.	0.01%
20	Cobalt( II ) diacetate*	71-48-7	200-755-8	N.D.	0.01%
21	Chromium trioxide*	1333-82-0	215-607-8	N.D.	0.01%
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.	0.01%
23	Strontium chromate*	7789-06-2	232-142-6	N.D.	0.01%
24	Dichromium tris(chromate)*	24613-89-6	246-356-2	N.D.	0.01%
25	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	234-329-8	N.D.	0.01%





#### **Test Report**

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No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)
26	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	N.D.
27	<sup>2</sup> Aluminosilicate Refractory Ceramic Fibres (RCF) **	-	-	N.D.
28	<sup>2</sup> Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) **	- (	è	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	<sup>®</sup> Diboron trioxide	1303-86-2	215-125-8	N.D.
36	Lead(II) bis methanesulfonate*	17570-76-2	401-750-5	N.D.
37	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	N.D.
38	Dioxobis(stearato)trilead*	12578-12-0	235-702-8	N.D.
39	Lead dinitrate*	10099-74-8	233-245-9	N.D.
40	Tetralead trioxide sulphate*	12202-17-4	235-380-9	N.D.
41	Lead monoxide (lead oxide)*	1317-36-8	215-267-0	N.D.
42	Lead titanium trioxide*	12060-00-3	235-038-9	N.D.
43	Acetic acid, lead salt, basic*	51404-69-4	257-175-3	N.D.
44	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1	N.D.
45	Tetraethyllead*	78-00-2	201-075-4	N.D.
46	[Phthalato(2-)]dioxotrilead*	69011-06-9	273-688-5	N.D.
47	Lead cyanamidate*	20837-86-9	244-073-9	N.D.
48	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt	68784-75-8	272-271-5	N.D.

12141-20-7

12626-81-2

1319-46-6

91031-62-8

1314-41-6

62229-08-7

12036-76-9

13814-96-5

11120-22-2

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(1:1), lead-doped\* Trilead dioxide phosphonate\*

Lead titanium zirconium oxide\*

Trilead bis(carbonate)dihydroxide\*

Fatty acids, C16-18, lead salts\*

Orange lead (lead tetroxide)\*

Sulfurous acid, lead salt, dibasic\*

Lead oxide sulfate\*

Lead bis(tetrafluoroborate)\*

Silicic acid, lead salt\*

235-252-2

235-727-4

215-290-6

292-966-7

215-235-6

263-467-1

234-853-7

237-486-0

234-363-3

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Report No. RLSHF001369680006

#### Test Method:

Refer to US EPA3052:1996, US EPA 3050B:1996, US EPA 3060A:1996, BS EN 14582:2007 for sample pretreatment.

Analyzed by ICP-OES, SEM-EDS, UV-Vis and IC.

#### Tested Sample/Part Description Grey metal

#### Note:

8.

- 1. w/w = weight by weight; 0.1% = 1000 mg/kg = 1000 ppm
- 2. N.D. = Not Detected (<report limit)
- 3. \*: Concentration value of the substance by the conversion from the test results of certain elements.
- \*\*: 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. <sup>(a)</sup>: 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.
  - <sup>®</sup>: 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.



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#### Appendix:

- 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).
  - 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.
  - 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.

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\*\*\* End of Report \*\*\*

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Report No. RLSHF001369680004

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Material: Sintered NdFeB with Nickel-Copper-Nickel Coating

The following sample	(s) and sample info	ormation was/w	ere submitted a	nd identified by/on th	e
behalf of the client					
Sample Name	Ni-Cu-NiNdFeB				
Sample Received Date	Feb.16,2013				
Testing Period	Feb.16,2013 to Fe	eb.20,2013			
Test Requested	As specified by cl under Regulation(	lient, to screen t (EC) No 1907/2	the 57 substances 2006 of REACH is	of very high concern(S n the submitted sample	SVHC) (s).
Test Method	Please refer to the	following page	e(s).		
Test Result(s)	Please refer to the	following page	e(s).		
Summary	According to the a are all less than 0	analytical result .1%(w/w) in the	s, concentrations e submitted sample	of 57 SVHC substance e(s).	es

Wey Zbong Verna chen by Reviewed by Tested Feb.20,2013 Approved by )ate Joy Su Senior Laboratory Manager No. 83402474 Centre Testing International (Shenzhen) Co., Ltd.Shanghai Branch No.1996, New Jinqiao Road, Pudong District, Shanghai

Complaint E-mail: complaint@cli-cert.com E-mail:info@cti-cert.com

Hotline 400-6788-333

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Report No. RLSHF001369680004

Test Result(s)

Page 2 of 6

No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
1	Cobalt dichloride*	7646-79-9	231-589-4	N.D.	0.01%
2	Diarsenic pentaoxide*	1303-28-2	215-116-9	N.D.	0.01%
3	Diarsenic trioxide*	1327-53-3	215-481-4	N.D.	0.01%
4	Sodium dichromate*	7789-12-0/ 10588-01-9	234-190-3	N.D.	0.01%
5	Lead hydrogen arsenate*	7784-40-9	232-064-2	N.D.	0.01%
6	Triethyl arsenate*	15606-95-8	427-700-2	N.D.	0.01%
7	<sup>©</sup> Lead chromate	7758-97-6	231-846-0	N.D.	0.05%
8	<sup>(2)</sup> Lead chromate molybdate sulphate red (C.I. Pigment Red 104)***	12656-85-8	235-759-9	N.D.	0.05%
9	<sup>®</sup> Lead sulfochromate yellow (C.I. Pigment Yellow 34)***	1344-37-2	215-693-7	N.D.	0.05%
10	<sup>®</sup> Boric acid	10043-35-3 11113-50-1	233-139-2 234-343-4	N.D.	0.01%
11	<sup>®</sup> Disodium tetraborate, anhydrous****	1330-43-4 12179-04-3 1303-96-4	215-540-4	N.D.	0.01%
12	<sup>®</sup> Tetraboron disodium heptaoxide, hydrate*****	12267-73-1	235-541-3	N.D.	0.01%
13	Sodium chromate*	7775-11-3	231-889-5	N.D.	0.01%
14	Potassium chromate*	7789-00-6	232-140-5	N.D.	0.01%
15	Ammonium dichromate*	7789-09-5	232-143-1	N.D.	0.01%
16	Potassium dichromate*	7778-50-9	231-906-6	N.D.	0.01%
17	Cobalt(II) sulphate*	10124-43-3	233-334-2	N.D.	0.01%
18	Cobalt( II ) dinitrate*	10141-05-6	233-402-1	N.D.	0.01%
19	Cobalt(II) carbonate*	513-79-1	208-169-4	N.D.	0.01%
20	Cobalt( II ) diacetate*	71-48-7	200-755-8	N.D.	0.01%
21	Chromium trioxide*	1333-82-0	215-607-8	N.D.	0.01%
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.	0.01%
23	Strontium chromate*	7789-06-2	232-142-6	N.D.	0.01%
24	Dichromium tris(chromate)*	24613-89-6	246-356-2	N.D.	0.01%
25	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	234-329-8	N.D.	0.01%





### **Test Report**

Report No. RLSHF001369680004 Test Result(s)

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No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
26	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	N.D.	0.01%
27	<sup>2</sup> Aluminosilicate Refractory Ceramic Fibres (RCF) **	-	-	N.D.	0.05%
28	<sup>2</sup> Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) **	- 6	(B)	N.D.	0.05%
29	Arsenic acid*	7778-39-4	231-901-9	N.D.	0.01%
30	Calcium arsenate*	7778-44-1	231-904-5	N.D.	0.01%
31	Trilead diarsenate*	3687-31-8	222-979-5	N.D.	0.01%
32	Lead diazide*	13424-46-9	236-542-1	N.D.	0.01%
33	Lead 2,4,6-trinitro-m-phenylene dioxide (Lead styphnate)*	15245-44-0	239-290-0	N.D.	0.01%
34	Lead dipicrate*	6477-64-1	229-335-2	N.D.	0.01%
35	<sup>®</sup> Diboron trioxide	1303-86-2	215-125-8	N.D.	0.01%
36	Lead(II) bis methanesulfonate*	17570-76-2	401-750-5	N.D.	0.01%
37	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	N.D.	0.01%
38	Dioxobis(stearato)trilead*	12578-12-0	235-702-8	N.D.	0.01%
39	Lead dinitrate*	10099-74-8	233-245-9	N.D.	0.01%
40	Tetralead trioxide sulphate*	12202-17-4	235-380-9	N.D.	0.01%
41	Lead monoxide (lead oxide)*	1317-36-8	215-267-0	N.D.	0.01%
42	Lead titanium trioxide*	12060-00-3	235-038-9	N.D.	0.01%
43	Acetic acid, lead salt, basic*	51404-69-4	257-175-3	N.D.	0.01%
44	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1	N.D.	0.01%
45	Tetraethyllead*	78-00-2	201-075-4	N.D.	0.01%
46	[Phthalato(2-)]dioxotrilead*	69011-06-9	273-688-5	N.D.	0.01%
47	Lead cyanamidate*	20837-86-9	244-073-9	N.D.	0.01%
48	Silicic acid ( $H_2Si_2O_5$ ), barium salt (1:1), lead-doped*	68784-75-8	272-271-5	N.D.	0.01%
49	Trilead dioxide phosphonate*	12141-20-7	235-252-2	N.D.	0.01%
50	Lead titanium zirconium oxide*	12626-81-2	235-727-4	N.D.	0.01%
51	Trilead bis(carbonate)dihydroxide*	1319-46-6	215-290-6	N.D.	0.01%
52	Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7	N.D.	0.01%
53	Orange lead (lead tetroxide)*	1314-41-6	215-235-6	N.D.	0.01%
54	Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1	N.D.	0.01%
55	Lead oxide sulfate*	12036-76-9	234-853-7	N.D.	0.01%
56	Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0	N.D.	0.01%
57	Silicic acid, lead salt*	11120-22-2	234-363-3	N.D.	0.01%

CENTRE TESTING INTERNATIONAL CORPORATION

Complaint call: 0755-33681700 Complaint E-mail: complaint@cli-cert.com E-mail:info@cti-cert.com





Report No. RLSHF001369680004

#### Test Method:

Refer to US EPA3052:1996, US EPA 3050B:1996, US EPA 3060A:1996, BS EN 14582:2007 for sample pretreatment.

Analyzed by ICP-OES, SEM-EDS, UV-Vis and IC.

Tested Sample/Part Description Metal with silvery plating

#### Note:

8.

- 1. w/w = weight by weight; 0.1% = 1000 mg/kg = 1000 ppm
- 2. N.D. = Not Detected (<report limit)
- 3. \*: Concentration value of the substance by the conversion from the test results of certain elements.
- \*\*: 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. <sup>(a)</sup>: 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.
  - <sup>®</sup>: 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.



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Report No. RLSHF001369680004

#### Appendix:

- 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).
  - 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.
  - 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.

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\*\*\* End of Report \*\*\*

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Report No. RLSHF001369680003

Material: Sintered NeFeB with Zinc Plating

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The following san	ple(s) and sample information was/were submitted and identified by/on the
behalf of the client	
Sample Name	Blue-White Zn NdFeB
Sample Received D	ate Feb.16,2013
Testing Period	Feb.16,2013 to Feb.20,2013
Test Requested	As specified by client, to screen the 57 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 57 SVHC substances are all less than $0.1\%(w/w)$ in the submitted sample(s).



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Reviewed by

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Uney Zoong



Feb.20,2013

No. 83402474 Centre Testing International (Shenzhen) Co., Ltd.Shanghai Branch No.1996, New Jinqiao Road, Pudong District, Shanghai

CENTRE TESTING INTERNATIONAL CORPORATION Complaint call: 0755-33681700 Complaint E-mail: complaint@cli-cert.com E-mail:info@cti-cert.com

Verna chen

Joy Su Senior Laboratory Manager



Report No. RLSHF001369680003

Test Result(s)

Page 2 of 6

No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
1	Cobalt dichloride*	7646-79-9	231-589-4	N.D.	0.01%
2	Diarsenic pentaoxide*	1303-28-2	215-116-9	N.D.	0.01%
3	Diarsenic trioxide*	1327-53-3	215-481-4	N.D.	0.01%
4	Sodium dichromate*	7789-12-0/ 10588-01-9	234-190-3	N.D.	0.01%
5	Lead hydrogen arsenate*	7784-40-9	232-064-2	N.D.	0.01%
6	Triethyl arsenate*	15606-95-8	427-700-2	N.D.	0.01%
7	<sup>®</sup> Lead chromate	7758-97-6	231-846-0	N.D.	0.05%
8	<sup>22</sup> Lead chromate molybdate sulphate red (C.I. Pigment Red 104)***	12656-85-8	235-759-9	N.D.	0.05%
9	<sup>®</sup> Lead sulfochromate yellow (C.I. Pigment Yellow 34)***	1344-37-2	215-693-7	N.D.	0.05%
10	<sup>®</sup> Boric acid	10043-35-3	233-139-2	ND	0.010/
10		11113-50-1	234-343-4	N.D.	0.01%
11	<sup>®</sup> Disodium tetraborate, anhydrous****	1330-43-4 12179-04-3 1303-96-4	215-540-4	N.D.	0.01%
12	<sup>®</sup> Tetraboron disodium heptaoxide, hydrate*****	12267-73-1	235-541-3	N.D.	0.01%
13	Sodium chromate*	7775-11-3	231-889-5	N.D.	0.01%
14	Potassium chromate*	7789-00-6	232-140-5	N.D.	0.01%
15	Ammonium dichromate*	7789-09-5	232-143-1	N.D.	0.01%
16	Potassium dichromate*	7778-50-9	231-906-6	N.D.	0.01%
17	Cobalt(II) sulphate*	10124-43-3	233-334-2	N.D.	0.01%
18	Cobalt( II ) dinitrate*	10141-05-6	233-402-1	N.D.	0.01%
19	Cobalt(II) carbonate*	513-79-1	208-169-4	N.D.	0.01%
20	Cobalt( II ) diacetate*	71-48-7	200-755-8	N.D.	0.01%
21	Chromium trioxide*	1333-82-0	215-607-8	N.D.	0.01%
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.	0.01%
23	Strontium chromate*	7789-06-2	232-142-6	N.D.	0.01%
24	Dichromium tris(chromate)*	24613-89-6	246-356-2	N.D.	0.01%
25	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	234-329-8	N.D.	0.01%



Report No. RLSHF001369680003 Test Result(s)

Page 3 of 6

No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
26	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	N.D.	0.01%
27	<sup>2</sup> Aluminosilicate Refractory Ceramic Fibres (RCF) **	-	-	N.D.	0.05%
28	<sup>2</sup> Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) **	- 6	8	N.D.	0.05%
29	Arsenic acid*	7778-39-4	231-901-9	N.D.	0.01%
30	Calcium arsenate*	7778-44-1	231-904-5	N.D.	0.01%
31	Trilead diarsenate*	3687-31-8	222-979-5	N.D.	0.01%
32	Lead diazide*	13424-46-9	236-542-1	N.D.	0.01%
33	Lead 2,4,6-trinitro-m-phenylene dioxide (Lead styphnate)*	15245-44-0	239-290-0	N.D.	0.01%
34	Lead dipicrate*	6477-64-1	229-335-2	N.D.	0.01%
35	<sup>®</sup> Diboron trioxide	1303-86-2	215-125-8	N.D.	0.01%
36	Lead(II) bis methanesulfonate*	17570-76-2	401-750-5	N.D.	0.01%
37	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	N.D.	0.01%
38	Dioxobis(stearato)trilead*	12578-12-0	235-702-8	N.D.	0.01%
39	Lead dinitrate*	10099-74-8	233-245-9	N.D.	0.01%
40	Tetralead trioxide sulphate*	12202-17-4	235-380-9	N.D.	0.01%
41	Lead monoxide (lead oxide)*	1317-36-8	215-267-0	N.D.	0.01%
42	Lead titanium trioxide*	12060-00-3	235-038-9	N.D.	0.01%
43	Acetic acid, lead salt, basic*	51404-69-4	257-175-3	N.D.	0.01%
44	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1	N.D.	0.01%
45	Tetraethyllead*	78-00-2	201-075-4	N.D.	0.01%
46	[Phthalato(2-)]dioxotrilead*	69011-06-9	273-688-5	N.D.	0.01%
47	Lead cyanamidate*	20837-86-9	244-073-9	N.D.	0.01%
48	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped*	68784-75-8	272-271-5	N.D.	0.01%
49	Trilead dioxide phosphonate*	12141-20-7	235-252-2	N.D.	0.01%
50	Lead titanium zirconium oxide*	12626-81-2	235-727-4	N.D.	0.01%
51	Trilead bis(carbonate)dihydroxide*	1319-46-6	215-290-6	N.D.	0.01%
52	Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7	N.D.	0.01%
53	Orange lead (lead tetroxide)*	1314-41-6	215-235-6	N.D.	0.01%
54	Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1	N.D.	0.01%
55	Lead oxide sulfate*	12036-76-9	234-853-7	N.D.	0.01%
56	Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0	N.D.	0.01%
57	Silicic acid, lead salt*	11120-22-2	234-363-3	N.D.	0.01%



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Report No. RLSHF001369680003

#### Test Method:

Refer to US EPA3052:1996, US EPA 3050B:1996, US EPA 3060A:1996, BS EN 14582:2007 for sample pretreatment.

Analyzed by ICP-OES, SEM-EDS, UV-Vis and IC.

Tested Sample/Part Description Metal with blue plating

#### Note:

8.

- 1. w/w = weight by weight; 0.1% = 1000 mg/kg = 1000 ppm
- 2. N.D. = Not Detected (<report limit)
- 3. \*: Concentration value of the substance by the conversion from the test 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. <sup>(a)</sup>: 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.
  - <sup>®</sup>: 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.



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#### Appendix:

- 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).
  - 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.
  - 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.

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\*\*\* End of Report \*\*\*

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