

ASSESSMENT REPORT PROPOSAL IN COMPLIANCE WITH REACH

We have been commissioned by the client to conduct REACH compliance assessment on their products (Contract No.: RT-SVHC-010-1100848). We have assessed the client's product under the European Regulation (EC) No 1907/2006 (hereinafter referred as REACH Regulation), including product categories, substances list, SVHC (Substances of Very High Concern) as well as the client's responsibilities and obligations for this product under REACH Regulation. The result and findings of the assessment and our proposals are described as follows:

1. Client's Information

| | |
|------------------------------------|---|
| Name: | Chanzhou Often Plastic New Material Co., Ltd. |
| Address: | No. 880 Zhongwu Avenue, Changzhou City, Jiangsu Province, P. R. China |
| Name of the contact person: | Jinzhen Shi |
| Tel: | +86-519-88829083 |
| Fax: | +86-519-88872825 |

2. Product Identification

| | |
|------------------------------------|-----------------------------------|
| Product name: | Flame retardant ABS |
| Type/ model: | CF-610B, CF-610T, CH-777D, CF610A |
| Physical appearance/colour: | Granule/ White |
| Product type: | mixture |

3. Product Substances Information

3.1 Substance on its own or in mixtures

| Index | Substance name | CAS No. | EC No. | Tone |
|-------|----------------|---------|--------|------|
| N/A | N/A | N/A | N/A | N/A |

3.2 Substance in article intended to be released

| Index | Substance name | CAS No. | EC No. | Tone |
|-------|----------------|---------|--------|------|
| N/A | N/A | N/A | N/A | N/A |

3.3 SVHC (Substance of Very High Concern) in article (Details see Annex 1)

4. Responsibilities and Obligations

4.1 Registration

4.1.1 The manufacturer "Chanzhou Often Plastic New Material Co., Ltd." sells the product "Flame retardant ABS" to non-EU "Plastic parts" manufacturers. It is the "Plastic parts" which is placed in the EU market and falls into the scope of REACH Regulation.

According to the definition in Article 3(3), Chapter 2, Title I, the "Plastic parts" is regarded as "Article" under REACH Regulation.

4.1.2 The Flame retardant ABS, as an integral part of Plastic parts, other than a mixture in a special container, is not intended to be released under normal and reasonable foreseeable conditions of use.

Therefore, the Flame retardant ABS will not trigger the obligation of registration according to Article 7(1), Chapter 2, Title 2 of REACH Regulation.

4.2 Notification

The concentrations of the SVHCs defined in Article 57 of REACH Regulation in Flame retardant ABS are all lower than 0.1% weight by weight (w/w), which is likely to result in even lower concentrations of those SVHCs in Plastic parts. Therefore the Flame retardant ABS will not trigger the obligation of notification according to Article 7(2) under REACH Regulation.

4.3 Information Communication down the Supply Chain

The concentrations of the SVHCs are lower than 0.1% weight by weight (w/w) in Flame retardant ABS and possibly even lower in Plastic parts, thus the Flame retardant ABS will not trigger the obligation of communicating information down the supply chain in accordance with Article 33.

4.4 Others

4.4.1 Authorisation

Since the manufacture of Flame retardant ABS and Plastic parts is based outside the EU, and the lifecycle of related substances outside EU is irrelevant with respect to REACH Regulation, there is no obligation of authorisation required for both Flame retardant ABS and Plastic parts.

4.4.2 Restriction

The directive on marketing and use of dangerous substances 76/769/EEC have been repealed since 1 June 2009, and our client should follow the restriction conditions outlined in Annex XVII in REACH Regulation from then on.

As we haven't received any testing request of Restricted Substance from our client, the detail of restricted substance in the product is unknown.

5. Assessment Conclusions

According to the product information provided by our client and related Articles of REACH Regulation, we draw the conclusion that:

- 1) It is the "Plastic parts" which is placed in the EU market and falls into the scope of REACH Regulation;**
- 2) "Plastic parts" meets the definition of article (Article 3(3)) and the "Flame retardant ABS" supplied by our client is its integral part;**
- 3) The "Flame retardant ABS" will not trigger further obligations under REACH Regulation about SVHC as it currently stands.**

6. Proposal for REACH Compliance

6.1 The client should inform his downstream users as soon as possible that the products mentioned above comply with REACH.

6.2 The client should pay constant attention to the SVHCs in the candidate list and fulfil related obligations



if necessary. This list may be updated regularly and it is important to monitor any changes to it.

6.3 The client should pay special attention to the restricted substance in the annex XVII.

6.4 The client should ensure the products are consistent with the sample provided to Chemical Inspection & Regulation Service Limited in material, vendors and production process.

6.5 The detection of Plastic parts is strongly recommended in order to comply with REACH Regulation.

If you want to verify the authenticity of the report, please login the report verification system according to the operating instruction: www.cirstek.com/dvs/. If you have any question about the report, please contact us.

Contact information:

| Office in Europe | China Office |
|---|--|
| <i>CIRS Europe</i> <i>Chemical Inspection & Regulation Service Limited</i> | <i>CIRS China</i> <i>Hangzhou CIRS Co., Limited</i> |
| <i>Address:</i> <i>Singleton House, Laurence Street</i> <i>Drogheda, Co. Louth, Ireland</i> | <i>Address:</i> <i>11/F., Building 1, Dongguan Hi-Tech Park, 1288 Chunbo Road,</i> <i>Binjiang District, Hangzhou, China</i> |
| <i>Website: www.cirs-reach.com</i> | <i>Website:www.cirs-group.com</i> |
| <i>Tel: +353 41 9806916</i> | <i>Tel: +86-571-87206555</i> |
| <i>Fax: +353 41 9806999</i> | <i>Fax:+86-571-87206533</i> |
| <i>Email: info@cirs-reach.com</i> | <i>Email: info@cirs-group.com</i> |

Prepared by:

Reviewed by:

Mr. Ryan Li
Regulatory Affairs Specialist

Mr. Yunbo Shi
Managing Director



STATEMENT

First: Instruction for the assessment conclusion

The above assessment conclusions that we have made is based on the understanding and analysis of the consignor's product and REACH regulation and only applies to the situation described in the report. This conclusion does not apply to any enterprise or product that fails to meet the description.

As parts of REACH regulation (for example Annex XIV) are still under modification, the above conclusion only applies to REACH regulation as it currently stands.

This report is only used to assist the consignor to know his own responsibility and obligation under REACH Regulation, and provide the actors in his supply chain with evidence that his products are in compliance with REACH regulation.

The consignor should study this report carefully. If there is any doubt or suggestion, please contact us and we will do our best to clarify and include any necessary amendments.

Second: Disclaimer Statement

We undertake no responsibility and no obligation to verify the authenticity of information supplied by the consignor.

The client should ensure the exported products are consistent with the sample provided to our company in material, vendors and production process. We can't be held responsible or bear any consequence which may result from differences between the sample products provided to us and the exported products.

We have completed this report with all professional competence, responsibility and reasonable due diligence, however due to the limited approach to the consignor, the products and the market we can't guarantee that the content of the report is fully accurate.

Consignor should make a cautious decision to adopt the assessment conclusion of this report. We assume no liability for any loss incurred as a result of the use of the conclusion.

Third: Privacy statement and others

This report has been completed by us independently. We guarantee that we shall not disclose information in the above report to any third party (except with the express written permission of consignor). We shall assume no responsibility for any loss caused by disclosure of the report.

We suggest that before offering the report the consignor should sign a security agreement with the third party in order to keep the information of consignor and products in the report from disclosure.

Chemical Inspection & Regulation Service Limited



ANNEX 1 TEST RESULTS OF SVHC (SUBSTANCE OF VERY HIGH CONCERNED)

Sample Description:

| | |
|----------------------------------|--|
| Name: | Flame retardant ABS |
| Quantity: | 1 |
| Description: | White granule |
| Date of receiving sample: | May 30, 2011 |
| Date of test: | May 30, 2011 – June 3, 2011 |
| Test requested: | Forty six (46) Substances of Very High Concern (SVHC) analysis. SVHC list is based on the publication by European Chemical Agency (ECHA) on 28 October 2008, 13 January 2010, 30 March 2010, 18 June 2010 and 15 December 2010, regarding regulation (EC) No 1907/2006 concerning the REACH. |

Test parts:

| No. | Parts No. | Parts Name |
|-----|-----------|---------------------|
| 1 | 1100848 | Flame retardant ABS |

1. Test Items and Methods:

(SVHCs publicized on 28 October 2008)

| No. | Item | CAS No. | MCV | Method | MDL |
|-----|---|--|-----------|-----------------|-----|
| 1 | Anthracene | 120-12-7 | 1000 | EPA 8270D | 100 |
| 2 | 4,4'- Diaminodiphenylmethane | 101-77-9 | 1000 | EPA 8270D | 100 |
| 3 | 5-tert-butyl-2,4,6-trinitro-m-xylene | 81-15-2 | 1000 | EPA 8270D | 100 |
| 4 | Hexabromocyclododecane | 25637-99-4 3194-55-6 (134237-51-71 34237-50-6 134237-52-8) | 1000 | EDXRF | 200 |
| | | 1000 | EPA 8270D | 100 | |
| 5 | Alkanes, C10-13,chloro (Short ChainChlorinated Paraffins) | 85535-84-8 | 1000 | EPA 8270D | 100 |
| 6 | Dibutyl phthalate(DBP) | 84-74-2 | 1000 | EPA 8270D | 10 |
| 7 | Bis (2-ethyl(hexyl)phthalate) (DEHP) | 117-81-7 | 1000 | EPA 8270D | 10 |
| 8 | Benzyl butyl phthalate(BBP) | 85-68-7 | 1000 | EPA 8270D | 10 |
| 9 | Cobalt dichloride | 7646-79-9 | 1000 | EDXRF | 200 |
| | | | | EPA 3052+6010C | 100 |
| 10 | Bis(tributyltin)oxide | 56-35-9 | 1000 | EDXRF | 200 |
| | | | | EPA 8270D | 100 |
| 11 | Sodium dichromate, dihydrate | 10588-01-9 | 1000 | EDXRF | 200 |
| | | | | EPA 3060A+7196A | 100 |
| 12 | Lead hydrogen arsenate | 7784-40-9 | 1000 | EDXRF | 200 |
| | | | | EPA 3052+6010C | 100 |
| 13 | Diarsenic trioxide | 1327-53-3 | 1000 | EDXRF | 200 |
| | | | | EPA 3052+6010C | 100 |
| 14 | Diarsenic pentaoxide | 1303-28-2 | 1000 | EDXRF | 200 |
| | | | | EPA 3052+6010C | 100 |
| 15 | Triethyl arsenate | 15606-95-8 | 1000 | EDXRF | 200 |
| | | | | EPA 8270D | 100 |



(SVHCs publicized on 13 January 2010 and 30 March 2010)

| No. | Item | CAS No. | MCV | Method | MDL |
|-----|--|------------|------|----------------|-----|
| 16 | Anthracene oil | 90640-80-5 | 1000 | EPA 8270D | 100 |
| 17 | Anthracene oil, anthracene paste, distn. lights | 91995-17-4 | 1000 | EPA 8270D | 100 |
| 18 | Anthracene oil, anthracene paste, anthracene fraction | 91995-15-2 | 1000 | EPA 8270D | 100 |
| 19 | Anthracene oil, anthracene-low | 90640-82-7 | 1000 | EPA 8270D | 100 |
| 20 | Anthracene oil, anthracene paste | 90640-81-6 | 1000 | EPA 8270D | 100 |
| 21 | Pitch, coal tar, high temp. | 65996-93-2 | 1000 | EPA 8270D | 100 |
| 22 | Acrylamide | 79-06-1 | 1000 | EPA 8270D | 100 |
| 23 | 2,4-Dinitrotoluene | 121-14-2 | 1000 | EPA 8270D | 100 |
| 24 | Diisobutyl phthalate | 84-69-5 | 1000 | EPA 8270D | 10 |
| 25 | Tris(2-chloroethyl)phosphate | 115-96-8 | 1000 | EPA 8270D | 100 |
| 26 | Aluminosilicate Refractory Ceramic Fibres | -- | 1000 | EDXRF | 200 |
| | | | | EPA 3052+6010C | 100 |
| 27 | Zirconia Aluminosilicate, Refractory Ceramic Fibres | -- | 1000 | EDXRF | 200 |
| | | | | EPA 3052+6010C | 100 |
| 28 | Lead chromate | 7758-97-6 | 1000 | EDXRF | 200 |
| | | | | EPA 3052+6010C | 100 |
| 29 | Lead chromate molybdate sulphate red(C.I. Pigment Red 104) | 12656-85-8 | 1000 | EDXRF | 200 |
| | | | | EPA 3052+6010C | 100 |
| 30 | Lead sulfochromate yellow (C.I. Pigment Yellow 34) | 1344-37-2 | 1000 | EDXRF | 200 |
| | | | | EPA 3052+6010C | 100 |

(SVHCs publicized on 18 June 2010)

| No. | Item | CAS No. | MCV | Method | MDL |
|-----|--|--------------------------------------|------|----------------|-----|
| 31 | Trichloroethylene | 79-01-6 | 1000 | EPA 8270D | 100 |
| 32 | Boric acid | 10043-35-3/ 11113-50-1 | 1000 | EPA 3052+6010C | 100 |
| 33 | Disodium tetraborate, anhydrous | 1330-43-4 12179-04-3 1303-96-4 | 1000 | EPA 3052+6010C | 100 |
| 34 | Tetraboron disodium heptaoxide, hydrate | 12267-73-1 | 1000 | EPA 3052+6010C | 100 |
| 35 | Sodium chromate | 7775-11-3 | 1000 | EPA 3052+6010C | 100 |
| 36 | Potassium chromate | 7789-00-6 | 1000 | EPA 3052+6010C | 100 |
| 37 | Ammonium dichromate | 7789-09-5 | 1000 | EPA 3052+6010C | 100 |
| 38 | Potassium dichromate | 7778-50-9 | 1000 | EPA 3052+6010C | 100 |

(SVHCs publicized on 15 December 2010)

| No. | Item | CAS No. | MCV | Method | MDL |
|-----|--|--------------------------|------|----------------|-----|
| 39 | Chromium trioxide | 1333-82-0 | 1000 | EPA 3052+6010C | 100 |
| 40 | 2-Ethoxyethanol | 110-80-5 | 1000 | EPA 8270D | 100 |
| 41 | 2-Methoxyethanol | 109-86-4 | 1000 | EPA 8270D | 100 |
| 42 | Cobalt (di)acetate | 71-48-7 | 1000 | EPA 3052+6010C | 100 |
| 43 | Cobalt (II) carbonate | 513-79-1 | 1000 | EPA 3052+6010C | 100 |
| 44 | Cobalt dinitrate | 10141-05-6 | 1000 | EPA 3052+6010C | 100 |
| 45 | Cobalt (II) sulphate | 10124-43-3 | 1000 | EPA 3052+6010C | 100 |
| 46 | Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid | 7738-94-5, 13530-68-2 | 1000 | EPA 3052+6010C | 100 |

Remarks:

- Unit: mg/kg;
1000mg/kg = 1000ppm = 0.1%.
- MCV= Maximum Concentration Values; MDL= Method Detection Limits.
- EDXRF (X-ray fluorescence spectrometry) = Screening Test (ST) method;
EPA 3052+6010C = Qualitative Test (QT) method.



2. Test results:

| No. | Test Item | Results(mg/kg) |
|-----|--|----------------|
| | | 1100848 |
| 1 | Anthracene | N.D.(QT) |
| 2 | 4,4'- Diaminodiphenylmethane | N.D.(QT) |
| 3 | 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene) | N.D.(QT) |
| 4 | Hexabromocyclododecane | N.D.(QT) |
| 5 | Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) | N.D.(QT) |
| 6 | Dibutyl phthalate(DBP) | N.D.(QT) |
| 7 | Bis (2-ethyl(hexyl)phthalate) (DEHP) | N.D.(QT) |
| 8 | Benzyl butyl phthalate(BBP) | N.D.(QT) |
| 9 | Cobalt dichloride | N.D.(ST) |
| 10 | Bis(tributyltin)oxide | N.D.(ST) |
| 11 | Sodium dichromate | N.D.(ST) |
| 12 | Lead hydrogen arsenate | N.D.(ST) |
| 13 | Diarsenic trioxide | N.D.(ST) |
| 14 | Diarsenic pentaoxide | N.D.(ST) |
| 15 | Triethyl arsenate | N.D.(ST) |
| 16 | Anthracene oil | N.D.(QT) |
| 17 | Anthracene oil, anthracene paste, distn. lights | N.D.(QT) |
| 18 | Anthracene oil, anthracene paste, anthracene fraction | N.D.(QT) |
| 19 | Anthracene oil, anthracene-low | N.D.(QT) |
| 20 | Anthracene oil, anthracene paste | N.D.(QT) |
| 21 | Pitch, coal tar, high temp. | N.D.(QT) |
| 22 | Acrylamide | N.D.(QT) |
| 23 | 2,4-Dinitrotoluene | N.D.(QT) |
| 24 | Diisobutyl phthalate | N.D.(QT) |
| 25 | tris(2-chloroethyl)phosphate | N.D.(QT) |
| 26 | Aluminosilicate Refractory Ceramic Fibres | N.D.(ST) |



| No. | Test Item | Results(mg/kg) |
|-----|---|----------------|
| | | 1100848 |
| 27 | Zirconia Aluminosilicate, Refractory Ceramic Fibres | N.D.(ST) |
| 28 | Lead chromate | N.D.(ST) |
| 29 | Lead chromate molybdate sulphate red (C.I. Pigment Red 104) | N.D.(ST) |
| 30 | Lead sulfochromate yellow (C.I. Pigment Yellow 34) | N.D.(ST) |
| 31 | Trichloroethylene | N.D.(QT) |
| 32 | Boric acid | N.D.(QT) |
| 33 | Disodium tetraborate, anhydrous | N.D.(QT) |
| 34 | Tetraboron disodium heptaoxide, hydrate | N.D.(QT) |
| 35 | Sodium chromate | N.D.(ST) |
| 36 | Potassium chromate | N.D.(ST) |
| 37 | Ammonium dichromate | N.D.(ST) |
| 38 | Potassium dichromate | N.D.(ST) |
| 39 | Chromium trioxide | N.D.(ST) |
| 40 | 2-Ethoxyethanol | N.D.(QT) |
| 41 | 2-Methoxyethanol | N.D.(QT) |
| 42 | Cobalt (di)acetate | N.D.(ST) |
| 43 | Cobalt (II) carbonate | N.D.(ST) |
| 44 | Cobalt dinitrate | N.D.(ST) |
| 45 | Cobalt (II) sulphate | N.D.(ST) |
| 46 | Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid | N.D.(ST) |



Remarks:

1. Test parts may be single material or a variety of materials which could not be divided by physical ways. Unless otherwise noted, components of base material, coating metal, coating paint and/or colouring pigment were no longer divided, but tested as one whole.
2. All results are applicable only to the test samples.
3. N.D. = Not detected (<MDL) MDL= Method Detection Limits
4. Because it is difficult to detect the substances CoCl_2 , $\text{C}_{24}\text{H}_{54}\text{OSn}_2$, $\text{Na}_2\text{Cr}_2\text{O}_7$, PbAsHO_4 , As_2O_3 , As_2O_5 , PbCrO_4 , Lead chromate molybdate sulphate red (C.I. Pigment Red 104), Lead sulfochromate yellow (C.I. Pigment Yellow 34), Triethyl arsenate, H_3BO_3 , $\text{Na}_2\text{B}_4\text{O}_7$, $\text{Na}_2\text{B}_4\text{O}_7 \cdot 7\text{H}_2\text{O}$, Na_2CrO_4 , K_2CrO_4 , $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$, $\text{K}_2\text{Cr}_2\text{O}_7$, CrO_3 , $\text{C}_4\text{H}_6\text{CoO}_4$, CCoO_3 , CoN_2O_6 , CoSO_4 and Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid via direct tests, we detect the substances via converting them into detectable elements by considering that all the relative elements exist in the form of their compounds when having the test.
5. Chemical Inspection & Regulation Service Limited reserves the right of final explanations.

3. Photos :



1100848

CIRS authenticate the photo on original report only

*****The end of report*****