

## ASSESSMENT REPORT PROPOSAL IN COMPLIANCE WITH REACH

**NO. RT-SVHC-010-1000945-3**

**DATE: Jul. 9, 2010**

We have been commissioned by the client to conduct REACH compliance assessment on their products (Contract No.: RT-SVHC-010-1000945-3). 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

<b>Name:</b>	Will Young Textiles Ltd., Huzhou
<b>Address:</b>	No. 920-925, Jinshiji Building, Fenghuang Road, Huzhou, Zhejiang, P. R. China
<b>Name of the contact person:</b>	Min Wu
<b>Tel:</b>	+86-572-2055205
<b>Fax:</b>	+86-572-2053009

### 2. Product Identification

<b>Product name:</b>	POLAR-KNITTED FLANNEL FABRIC
<b>Type/ model:</b>	N/A
<b>Physical appearance/colour:</b>	Fabric/black
<b>Product type:</b>	Article

### 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** According to the definition in Article 3(3), Chapter 2, Title I, the client's product, POLAR-KNITTED FLANNEL FABRIC is regarded as "Article" under REACH Regulation.

**4.1.2** According to Article 7(1), Chapter 2, Title 2 of REACH Regulation, there is no substance intended to be

released under normal or reasonably foreseeable conditions of use in the client's product. Therefore, registration is not required.

#### **4.2 Notification**

As the concentrations of the SVHCs defined in Article 57 of REACH Regulation in the client's products are less than 0.1% weight by weight (w/w), the obligation of notification is not required according to Article 7(2) under REACH Regulation.

Note: Dissenting views, questioning the application of the 0.1 % threshold to the entire article have been notified by 6 Member States (Austria, Belgium, Denmark, France, Germany and Sweden) and this calculation method was not endorsed by these Member States.

In this report, we adopt the opinions from these Member States that the 0.1% threshold should relate to individual articles, parts or materials that a complex article consists of.

#### **4.3 Information Communication down the Supply Chain**

As the concentrations of the SVHCs in the client's product are less than 0.1% weight by weight (w/w), the obligation of communicating information down the supply chain is not required in accordance with Article 33 of REACH Regulation.

#### **4.4 Others**

##### **4.4.1 Authorisation**

Since the manufacture of this product 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 the client's product.

##### **4.4.2 Restriction**

The directive on marketing and use of dangerous substances 76/769/EEC have been repealed since 1 June 2009, and the 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 the client and related Articles of REACH Regulation, we draw the conclusion that:

**The products supplied by the client comply with 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 exported products are consistent with the sample provided to Chemical Inspection & Regulation Service Limited in material, vendors and production process.

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/](http://www.cirstek.com/dvs/). If you have any question about the report, please contact us.

### Contact information:

Office in Europe	China Office
<i>CIRS Ireland</i>	<i>China REACH Solution Center</i>
<i>Chemical Inspection &amp; Regulation Service Limited</i>	<i>Hangzhou REACH Product Technic Co., Ltd</i>
<i>Address:</i> <i>Singleton House, Laurence Street</i> <i>Drogheda, Co. Louth, Ireland</i>	<i>Address:</i> <i>west lake International Plaza Of Science and Technology Tower</i> <i>A,11F,No 391 Wen'er Road, Hangzhou Zhejiang P,R, China</i>
<i>Website: www.cirs.ie</i>	<i>Website:www.reach123.cn</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.ie</i>	<i>Email: info@reach123.cn</i>

Prepared by:

*Angel Lv*

Ms. Angel Lv  
Regulatory Affairs Specialist

Reviewed by:

*yshi*

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:

<b>Name:</b>	POLAR-KNITTED FLANNEL FABRIC
<b>Quantity:</b>	1
<b>Description:</b>	Black fabric
<b>Date of receiving sample:</b>	Jul. 5, 2010
<b>Date of test:</b>	Jul. 5, 2010 – Jul. 9, 2010
<b>Test requested:</b>	Thirty eight (38) 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 and 18 June 2010, regarding regulation (EC) No 1907/2006 concerning the REACH.

## 1. List of SVHC

NO.	Name	CAS No.	EC No.	REACH Limits (mg/kg)	Classification
1	Anthracene	120-12-7	204-371-1	1000	PBT
2	4,4'- Diaminodiphenylmethane	101-77-9	202-974-4	1000	CMR2
3	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	1000	vPvB
4	Hexabromocyclododecane	25637-99-4 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8)	247-148-4	1000	PBT
5	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5	1000	PBT
6	Dibutyl phthalate(DBP)	84-74-2	201-557-4	1000	CMR2
7	Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	204-211-0	1000	CMR2
8	Benzyl butyl phthalate(BBP)	85-68-7	201-622-7	1000	CMR2
9	Cobalt dichloride	7646-79-9	231-589-4	1000	CMR2
10	Bis(tributyltin)oxide	56-35-9	200-268-0	1000	PBT
11	Sodium dichromate	10588-01-9	234-190-3	1000	CMR1
12	Lead hydrogen arsenate	7784-40-9	232-064-2	1000	CMR1,2
13	Diarsenic trioxide	1327-53-3	215-481-4	1000	CMR1
14	Diarsenic pentaoxide	1303-28-2	215-116-9	1000	CMR1
15	Triethyl arsenate	15606-95-8	427-700-2	1000	CMR1
16	Anthracene oil	90640-80-5	292-602-7	1000	PBT, vPvB, CMR2
17	Anthracene oil, anthracene paste, distn. lights	91995-17-4	295-278-5	1000	PBT, vPvB, CMR2
18	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9	1000	PBT, vPvB, CMR2
19	Anthracene oil, anthracene-low	90640-82-7	292-604-8	1000	PBT, vPvB, CMR2

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NO.	Name	CAS No.	EC No.	REACH Limits (mg/kg)	Classification
20	Anthracene oil, anthracene paste	90640-81-6	292-603-2	1000	PBT, vPvB, CMR2
21	Pitch, coal tar, high temp.	65996-93-2	266-028-2	1000	PBT, vPvB, CMR2
22	Acrylamide	79-06-1	201-173-7	1000	CMR2
23	2,4-Dinitrotoluene	121-14-2	204-450-0	1000	CMR2
24	Diisobutyl phthalate	84-69-5	201-553-2	1000	CMR2
25	tris(2-chloroethyl)phosphate	115-96-8	204-118-5	1000	CMR2
26	Aluminosilicate Refractory Ceramic Fibres	--	--	1000	CMR2
27	Zirconia Aluminosilicate, Refractory Ceramic Fibres	--	--	1000	CMR2
28	Lead chromate	7758-97-6	231-846-0	1000	CMR1,2
29	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	235-759-9	1000	CMR1,2
30	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	215-693-7	1000	CMR1,2
31	Trichloroethylene	79-01-6	201-167-4	1000	CMR2
32	Boric acid	10043-35-3/ 11113-50-1	233-139-2/ 234-343-4	1000	CMR2
33	Disodium tetraborate, anhydrous	1330-43-4 12179-04-3 1303-96-4	215-540-4	1000	CMR2
34	Tetraboron disodium heptaoxide, hydrate	12267-73-1	235-541-3	1000	CMR2
35	Sodium chromate	7775-11-3	231-889-5	1000	CMR2
36	Potassium chromate	7789-00-6	232-140-5	1000	CMR2
37	Ammonium dichromate	7789-09-5	232-143-1	1000	CMR2
38	Potassium dichromate	7778-50-9	231-906-6	1000	CMR2

**Remarks: classification (defined by 67/548/EEC)**

1. PBT: Persistent, Bioaccumulative and Toxic
2. CMR1, 2: Carcinogenic, Mutagen, and toxic to reproduction Category 1 or 2.
3. vPvB: very high persistent, very high Bioaccumulative
4. 1000mg/kg = 1000ppm= 0.1%.

## 2. Test Method:

NO.	Item	Screening	Methods (ST)	Quantitative Methods (QT)	
		Method	Limit(mg/kg)	Method	Limit(mg/kg)
1	Anthracene	N.A.	N.A.	EPA 8270D	100
2	4,4'- Diaminodiphenylmethane	N.A.	N.A.	EPA 8270D	100
3	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	N.A.	N.A.	EPA 8270D	100
4	Hexabromocyclododecane	EDXRF	200	EPA 8270D	100
5	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	N.A.	N.A.	EPA 8270D	100
6	Dibutyl phthalate(DBP)	N.A.	N.A.	EPA 8270D	100
7	Bis (2-ethyl(hexyl)phthalate) (DEHP)	N.A.	N.A.	EPA 8270D	100
8	Benzyl butyl phthalate(BBP)	N.A.	N.A.	EPA 8270D	100
9	Cobalt dichloride	EDXRF	200	EPA 3052+6010C	100
10	Bis(tributyltin)oxide	EDXRF	200	EPA 8270D	100
11	Sodium dichromate	EDXRF	200	EPA 3060A+7196A	100
12	Lead hydrogen arsenate	EDXRF	200	EPA 3052+6010C	100
13	Diarsenic trioxide	EDXRF	200	EPA 3052+6010C	100
14	Diarsenic pentaoxide	EDXRF	200	EPA 3052+6010C	100
15	Triethyl arsenate	EDXRF	200	EPA 8270D	100
16	Anthracene oil	N.A.	N.A.	EPA 8270D	100
17	Anthracene oil, anthracene paste, distn. lights	N.A.	N.A.	EPA 8270D	100
18	Anthracene oil, anthracene paste, anthracene fraction	N.A.	N.A.	EPA 8270D	100
19	Anthracene oil, anthracene-low	N.A.	N.A.	EPA 8270D	100
20	Anthracene oil, anthracene paste	N.A.	N.A.	EPA 8270D	100

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NO.	Item	Screening Methods (ST)		Quantitative Methods (QT)	
		Method	Limit(mg/kg)	Method	Limit(mg/kg)
21	Pitch, coal tar, high temp.	N.A.	N.A.	EPA 8270D	100
22	Acrylamide	N.A.	N.A.	EPA 8270D	100
23	2,4-Dinitrotoluene	N.A.	N.A.	EPA 8270D	100
24	Diisobutyl phthalate	N.A.	N.A.	EPA 8270D	100
25	tris(2-chloroethyl)phosphate	N.A.	N.A.	EPA 8270D	100
26	Aluminosilicate Refractory Ceramic Fibres	EDXRF	200	EPA 3052+6010C	100
27	Zirconia Aluminosilicate, Refractory Ceramic Fibres	EDXRF	200	EPA 3052+6010C	100
28	Lead chromate	EDXRF	200	EPA 3052+6010C	100
29	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	EDXRF	200	EPA 3052+6010C	100
30	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	EDXRF	200	EPA 3052+6010C	100
31	Trichloroethylene	N.A.	N.A.	EPA 8270D	100
32	Boric acid	N.A.	N.A.	EPA 3052+6010C	100
33	Disodium tetraborate, anhydrous	N.A.	N.A.	EPA 3052+6010C	100
34	Tetraboron disodium heptaoxide, hydrate	N.A.	N.A.	EPA 3052+6010C	100
35	Sodium chromate	EDXRF	200	EPA 3052+6010C	100
36	Potassium chromate	EDXRF	200	EPA 3052+6010C	100
37	Ammonium dichromate	EDXRF	200	EPA 3052+6010C	100
38	Potassium dichromate	EDXRF	200	EPA 3052+6010C	100

**Remarks:**

1. N.A.: Not Applicable.
2. EDXRF: X-ray fluorescence spectrometry.

### 3. Parts and Photos :

No.	Parts No.	Parts Name
1	1000945-3	POLAR-KNITTED FLANNEL FABRIC



1000945-3

#### 4. Test results:

No.	Test Item	Results(mg/kg)
		1000945-3
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)

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No.	Test Item	Results(mg/kg)
		1000945-3
26	Aluminosilicate Refractory Ceramic Fibres	N.D.(ST)
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)

**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  $\text{CoCl}_2$ ,  $\text{C}_{24}\text{H}_{54}\text{OSn}_2$ ,  $\text{Na}_2\text{Cr}_2\text{O}_7$ ,  $\text{PbAsHO}_4$ ,  $\text{As}_2\text{O}_3$ ,  $\text{As}_2\text{O}_5$ ,  $\text{PbCrO}_4$ , Lead chromate molybdate sulphate red (C.I. Pigment Red 104), Lead sulfochromate yellow (C.I. Pigment Yellow 34), Triethyl arsenate,  $\text{H}_3\text{BO}_3$ ,  $\text{Na}_2\text{B}_4\text{O}_7$ ,  $\text{Na}_2\text{B}_4\text{O}_7 \cdot 7\text{H}_2\text{O}$ ,  $\text{Na}_2\text{CrO}_4$ ,  $\text{K}_2\text{CrO}_4$ ,  $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$  and  $\text{K}_2\text{Cr}_2\text{O}_7$  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.

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