

## Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 1 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



**The following sample(s) was/were submitted and identified by/on behalf of the applicant as :**

Sample Description : PUFF DINO LUBRICANT  
Style/Item No. : 恐龍 DA42 420ml  
Sample Receiving Date : 2012/09/10  
Testing Period : 2012/09/10 TO 2012/09/17 AND 2012/12/22 TO 2013/01/24 AND  
2013/06/20 TO 2013/07/10

**Test Requested** : 144 Substances of Very High Concern (SVHC) screening. SVHC candidate list based on the publication by European Chemicals Agency (ECHA) on 2013 June 20, regarding Regulation (EC) No 1907/2006 concerning the REACH.

**Test Method** : Please refer to next page(s).

**Test Result(s)** : Please refer to next page(s).

**Summary** : According to the interpretation of ECHA and the majority of EU member states on the definition of an article as well as the specified scope and analytical technique, concentrations of all SVHC are <0.1% in the submitted sample(s).

\* This report is added testing by CC/2012/90065 and combined with CC/2012/90065B \*

  
**Edison Chang / Sr. Supervisor**  
**Signed for and on behalf of**  
**SGS TAIWAN LTD.**  
**Chemical Laboratory – Taipei**

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 2 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



**Test Sample :** TRANSPARENT YELLOW LIQUID

**Test Method :** SGS In-House method-RSTS-EE-SVHC-007. Analyzed by ICP-AES, UV-VIS, GC/MS, LC/MS, GC/FPD, LC/MS/DAD.

**Remark:**

- The chemical analysis of 144 SVHC is performed by means of currently available analytical techniques against the list published by ECHA on 2013 June 20.  
Refer to: <http://echa.europa.eu/web/guest/candidate-list-table>
- In accordance with Regulation (EC) No 1907/2006, any producer or importer of articles shall notify ECHA, in accordance with paragraph 2 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation, if (a) the substance is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance is present in those articles above a concentration of 0.1% weight by weight (w/w).
- Article 33 of Regulation (EC) No 1907/2006 requires supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.
- If a SVHC is found over the reporting limit, client is suggested to identify the component which contains the SVHC and the exact concentration of the SVHC by requesting further quantitative analysis from the laboratory.

**Test Result(s)**

Substance Name	Concentration of Article (%)	RL (%)	Classification
Anthracene (CAS No.: 120-12-7)	n.d.	0.05	PBT
4,4' - Diaminodiphenylmethane (CAS No.: 101-77-9)	n.d.	0.05	CC 1B
DBP (Dibutyl phthalate) (CAS No.: 84-74-2)	n.d.	0.05	TRC 1B
BBP (Benzyl butyl phthalate) (CAS No.: 85-68-7)	n.d.	0.05	TRC 1B
Bis (2-ethyl(hexyl)phthalate) (DEHP) (CAS No.: 117-81-7)	n.d.	0.05	TRC 1B
5-tert-butyl-2,4,6-trinitro- m-xylene (Musk Xylene) (CAS No.: 81-15-2)	n.d.	0.05	vPvB
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified ( $\alpha$ - HBCDD, $\beta$ - HBCDD, $\gamma$ - HBCDD) (CAS No.: 25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	n.d.	0.05	PBT
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (CAS No.: 85535-84-8)	n.d.	0.05	PBT
Bis(tributyltin)oxide*** (CAS No.: 56-35-9)	n.d.	-	PBT

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 3 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



Substance Name	Concentration of Article (%)	RL (%)	Classification
Cobalt dichloride (CAS No.: 7646-79-9)	n.d.	0.005	CC 1B; TRC 1B
Diarsenic pentaoxide*** (CAS No.: 1303-28-2)	n.d.	-	CC 1A
Diarsenic trioxide*** (CAS No.: 1327-53-3)	n.d.	-	CC 1A
Triethyl arsenate*** (CAS No.: 15606-95-8)	n.d.	-	CC 1A
Lead hydrogen arsenate*** (CAS No.: 7784-40-9) (※1)	n.d.	-	CC 1A; TRC 1A
Sodium chromate*** (CAS No.: 7775-11-3)	n.d.	-	CC 1B; MC 1B; TRC 1B
Ammonium dichromate*** (CAS No.: 7789-09-5)	n.d.	-	CC 1B; MC 1B; TRC 1B
Potassium dichromate*** (CAS No.: 7778-50-9)	n.d.	-	CC 1B; MC 1B; TRC 1B
Potassium chromate*** (CAS No.: 7789-00-6)	n.d.	-	CC 1B; MC 1B
Sodium dichromate*** (CAS No.: 10588-01-9, 7789-12-0(*))	n.d.	-	CC 1B; MC 1B; TRC 1B
Chromium trioxide*** (CAS No.: 1333-82-0)	n.d.	-	CC 1A; MC 1B
Acids generated from chromium trioxide and their oligomers: Chromic acid*** (CAS No.: 7738-94-5)	n.d.	-	CC 1B
Acids generated from chromium trioxide and their oligomers: Dichromic acid*** (CAS No.: 13530-68-2)	n.d.	-	CC 1B
Acids generated from chromium trioxide and their oligomers: Oligomers of chromic acid and dichromic acid (* 1)	n.d.	-	CC 1B
Strontium chromate*** (CAS No.: 7789-06-2)	n.d.	-	CC 1B
Anthracene oil (CAS No.: 90640-80-5) (**)	n.d.	0.05	PBT; vPvB; CC 1B
Anthracene oil, anthracene paste, distn. Lights (CAS No.: 91995-17-4) (**)	n.d.	0.05	PBT; vPvB; CC 1B; MC 1B
Anthracene oil, anthracene paste, anthracene fraction (CAS No.: 91995-15-2) (**)	n.d.	0.05	PBT; vPvB; CC 1B; MC 1B
Anthracene oil, anthracene-low (CAS No.: 90640-82-7) (**)	n.d.	0.05	PBT; vPvB; CC 1B; MC
Anthracene oil, anthracene paste (CAS No.: 90640-81-6) (**)	n.d.	0.05	PBT; vPvB; CC 1B; MC
Pitch, coal tar, high-temp. (CAS No.: 65996-93-2) (**)	n.d.	0.05	PBT; vPvB; CC 1B
DIBP (Di-isobutyl phthalate) (CAS No.: 84-69-5)	n.d.	0.05	TRC 1B
2,4-Dinitrotoluene (CAS No.: 121-14-2)	n.d.	0.05	CC 1B
Tris(2-chloroethyl) phosphate (TCEP) (CAS No.: 115-96-8)	n.d.	0.05	TRC 1B
Lead chromate (CAS No.: 7758-97-6)	n.d.	0.01	CC 1B; TRC 1A

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 4 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



Substance Name	Concentration of Article (%)	RL (%)	Classification
Lead chromate molybdate sulphate red (C.I. Pigment Red 104) (CAS No.: 12656-85-8)	n.d.	0.01	CC 1B; TRC 1A
Lead sulfochromate yellow (C.I. Pigment Yellow 34) (CAS No.: 1344-37-2)	n.d.	0.01	CC 1B; TRC 1A
Acrylamide (CAS No.: 79-06-1)	n.d.	0.05	CC 1B; MC 1B
Boric acid*** (CAS No.: 10043-35-3; 11113-50-1)	n.d.	-	TRC 1B
Disodium tetraborate, anhydrous*** (CAS No.: 1303-96-4, 1330-43-4, 12179-04-3)	n.d.	-	TRC 1B
Tetraboron disodium heptaoxide, hydrate (CAS No.: 12267-73-1) (*2)	n.d.	-	TRC 1B
Trichloroethylene (CAS No.: 79-01-6)	n.d.	0.05	CC 1B
Cobalt(II) sulphate*** (CAS No.: 10124-43-3)	n.d.	-	CC 1B; TRC 1B
Cobalt(II) dinitrate*** (CAS No.: 10141-05-6)	n.d.	-	CC 1B; TRC 1B
Cobalt(II) carbonate*** (CAS No.: 513-79-1)	n.d.	-	CC 1B; TRC 1B
Cobalt(II) diacetate*** (CAS No.: 71-48-7)	n.d.	-	CC 1B; TRC 1B
2-Methoxyethanol (CAS No.: 109-86-4)	n.d.	0.05	TRC 1B
2-Ethoxyethanol (CAS No.: 110-80-5)	n.d.	0.05	TRC 1B
2-ethoxyethyl acetate (CAS No.: 111-15-9)	n.d.	0.05	TRC 1B
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) (CAS No.: 68515-42-4)	n.d.	0.05	TRC 1B
Hydrazine (CAS No.: 7803-57-8; 302-01-2)	n.d.	0.05	CC 1B
1-methyl-2-pyrrolidone (CAS No.: 872-50-4)	n.d.	0.05	TRC 1B
1,2,3-trichloropropane (CAS No.: 96-18-4)	n.d.	0.05	CC 1B; TRC 1B
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) (CAS No.: 71888-89-6)	n.d.	0.05	TRC 1B
Arsenic acid*** (CAS No.: 7778-39-4)	n.d.	-	CC 1A
Calcium arsenate*** (CAS No.: 7778-44-1)	n.d.	-	CC 1A
Trilead diarsenate*** (CAS No.: 3687-31-8) (※1)	n.d.	-	CC 1A; TRC 1A
Lead diazide, Lead azide*** (CAS No.: 13424-46-9)	n.d.	-	TRC 1A
Lead styphnate*** (CAS No.: 15245-44-0)	n.d.	-	TRC 1A
Lead dipicrate*** (CAS No.: 6477-64-1)	n.d.	-	TRC 1A
Dichromium tris (chromate)*** (CAS No.: 24613-89-6)	n.d.	-	CC 1B

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Term-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 5 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



Substance Name	Concentration of Article (%)	RL (%)	Classification
Potassium hydroxyoctaoxodizincatedi- chromate*** (CAS No.: 11103-86-9)	n.d.	-	CC 1A
Pentazinc chromate octahydroxide*** (CAS No.: 49663-84-5)	n.d.	-	CC 1A
Formaldehyde, oligomeric reaction products with aniline (technical MDA) (CAS No.: 25214-70-4)	n.d.	0.05	CC 1B
Bis(2-methoxyethyl) phthalate (CAS No.: 117-82-8)	n.d.	0.05	TRC 1B
2-Methoxyaniline; o-Anisidine (CAS No.: 90-04-0)	n.d.	0.05	CC 1B
4-(1,1,3,3-tetramethylbutyl) phenol, (4-tert-Octylphenol) (CAS No.: 140-66-9)	n.d.	0.05	EQC
1,2-Dichloroethane (CAS No.: 107-06-2)	n.d.	0.05	CC 1B
Bis(2-methoxyethyl) ether (CAS No.: 111-96-6)	n.d.	0.05	TRC 1B
N,N-dimethylacetamide (DMAC) (CAS No.: 127-19-5)	n.d.	0.05	TRC 1B
2,2'-dichloro- 4,4'-methylenedianiline (MOCA) (CAS No.: 101-14-4)	n.d.	0.05	CC 1B
Phenolphthalein (CAS No.: 77-09-8)	n.d.	0.05	CC 1B
Aluminosilicate, Refractory Ceramic Fibres 【oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges】	n.d.	0.05	CC 1B
Zirconia Aluminosilicate, Refractory Ceramic Fibres 【oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges】	n.d.	0.05	CC 1B
1,2-bis (2-methoxyethoxy) ethane (TEGDME; triglyme) (CAS No.: 112-49-2)	n.d.	0.05	TRC 1B
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) (CAS No.: 110-71-4)	n.d.	0.05	TRC 1B
Formamide (CAS No.: 75-12-7)	n.d.	0.05	TRC 1B
Lead(II) bis(methanesulfonate)*** (CAS No.: 17570-76-2)	n.d.	-	TRC 1B
TGIC (1,3,5-tris(oxiranylmethyl)- 1,3,5-triazine-2,4,6 (1H,3H,5H)-trione) (CAS No.: 2451-62-9)	n.d.	0.05	MC 1B
β-TGIC (1,3,5-tris [(2S and 2R)-2,3-epoxypropyl]- 1,3,5-triazine-2,4,6-(1H,3H,5H)-trione) (CAS No.: 59653-74-6) (※3)	n.d.	0.05	MC 1B
4,4'-bis (dimethylamino) benzophenone (Michler's ketone) (CAS No.: 90-94-8)	n.d.	0.05	CC 1B

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 6 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



Substance Name	Concentration of Article (%)	RL (%)	Classification
N,N,N',N'-tetramethyl- 4,4'-methylenedianiline (Michler's base) (CAS No.: 101-61-1)	n.d.	0.05	CC 1B
[4-[4,4'-bis(dimethylamino) benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3) (CAS No.: 548-62-9) [with ≥ 0.1% of Michler's ketone or Michler's base]	n.d.	0.05	CC 1B
[4-[[4-anilino-1-naphthyl] [4-(dimethylamino) phenyl] methylene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) (CAS No.: 2580-56-5) [with ≥ 0.1% of Michler's ketone or Michler's base]	n.d.	0.05	CC 1B
α,α-Bis[4-(dimethylamino) phenyl]-4 (phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4) (CAS No.: 6786-83-0) [with ≥ 0.1% of Michler's ketone or Michler's base]	n.d.	0.05	CC 1B
Diboron trioxide*** (CAS No.: 1303-86-2)	n.d.	-	TRC 1B
4,4'-bis (dimethylamino)-4''-(methylamino) trityl alcohol (CAS No.: 561-41-1) [with ≥ 0.1% of Michler's ketone or Michler's base]	n.d.	0.05	CC 1B
Bis(pentabromophenyl) ether (DecaBDE) (CAS No.: 1163-19-5)	n.d.	0.05	PBT
Pentacosafuorotridecanoic acid (CAS No.: 72629-94-8)	n.d.	0.05	PBT
Tricosafuorododecanoic acid (CAS No.: 307-55-1)	n.d.	0.05	PBT
Henicosafuoroundecanoic acid (CAS No.: 2058-94-8)	n.d.	0.05	PBT
Heptacosafuorotetradecanoic acid (CAS No.: 376-06-7)	n.d.	0.05	PBT
4-(1,1,3,3-tetramethylbutyl) phenol, ethoxylated- covering well-defined substances and UVCB substances, polymers and homologues	n.d.	0.05	EQC
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	n.d.	0.05	EQC
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (CAS No.: 123-77-3)	n.d.	0.05	EQC
Cyclohexane-1,2-dicarboxylic anhydride (HHPA), cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2- dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA) (CAS No.: 85-42-7, 13149-00-3, 14166-21-3)	n.d.	0.05	EQC

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



# Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 7 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



Substance Name	Concentration of Article (%)	RL (%)	Classification
Hexahydromethylphthalic anhydride (CAS No.: 25550-51-0)	n.d.	0.05	EQC
Hexahydro-4-methylphthalic anhydride (CAS No.: 19438-60-9)			
Hexahydro-1-methylphthalic anhydride (CAS No.: 48122-14-1)			
Hexahydro-3-methylphthalic anhydride (CAS No.: 57110-29-9)			
Methoxy acetic acid (CAS No.: 625-45-6)	n.d.	0.05	TRC 1B
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (CAS No.: 84777-06-0)	n.d.	0.05	TRC 1B
Diisopentylphthalate (CAS No.: 605-50-5)	n.d.	0.05	TRC 1B
N-pentyl-isopentylphthalate (CAS No.: 776297-69-9)	n.d.	0.05	TRC 1B
1,2-Diethoxyethane (CAS No.: 629-14-1)	n.d.	0.05	TRC 1B
N,N-dimethylformamide; dimethyl formamide (CAS No.: 68-12-2)	n.d.	0.05	TRC 1B
Dibutyltin dichloride (DBTC) (CAS No.: 683-18-1)	n.d.	0.05	TRC 1B
Acetic acid, lead salt, basic*** (CAS No.: 51404-69-4)	n.d.	-	TRC 1A
Trilead bis(carbonate) dihydroxide (basic lead carbonate)*** (CAS No.: 1319-46-6)	n.d.	-	TRC 1A
Lead oxide sulfate*** (CAS No.: 12036-76-9)	n.d.	-	TRC 1A
[Phthalato(2-)] dioxotrilead*** (CAS No.: 69011-06-9)	n.d.	-	TRC 1A
Dioxobis(stearato) trilead*** (CAS No.: 12578-12-0)	n.d.	-	TRC 1A
Fatty acids, C16-18, lead salts*** (CAS No.: 91031-62-8)	n.d.	-	TRC 1A
Lead cyanamidate*** (CAS No.: 20837-86-9)	n.d.	-	TRC 1A
Lead dinitrate*** (CAS No.: 10099-74-8)	n.d.	-	TRC 1A
Lead oxide (lead monoxide)*** (CAS No.: 1317-36-8)	n.d.	-	TRC 1A
Lead tetroxide (orange lead)*** (CAS No.: 1314-41-6)	n.d.	-	TRC 1A
Pentalead tetraoxide sulphate*** (CAS No.: 12065-90-6)	n.d.	-	TRC 1A
Silicic acid, lead salt*** (CAS No.: 11120-22-2)	n.d.	-	TRC 1A
Sulfurous acid, lead salt, dibasic*** (CAS No.: 62229-08-7)	n.d.	-	TRC 1A
Tetraethyllead*** (CAS No.: 78-00-2)	n.d.	-	TRC 1A
Tetralead trioxide sulphate*** (CAS No.: 12202-17-4)	n.d.	-	TRC 1A
Lead bis(tetrafluoroborate)*** (CAS No.: 13814-96-5)	n.d.	-	TRC 1A
Lead titanium trioxide*** (CAS No.: 12060-00-3)	n.d.	-	TRC 1A
Lead Titanium Zirconium Oxide*** (CAS No.: 12626-81-2)	n.d.	-	TRC 1A
Pyrochlore, antimony lead yellow*** (CAS No.: 8012-00-8)	n.d.	-	TRC 1A

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 8 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



Substance Name	Concentration of Article (%)	RL (%)	Classification
Trilead dioxide phosphonate*** (CAS No.: 12141-20-7)	n.d.	-	TRC 1A
Silicic acid, barium salt, lead-doped (※4) (CAS No.: 68784-75-8)	n.d.	0.05	TRC 1A
Furan (CAS No.: 110-00-9)	n.d.	0.05	CC 1B
Propylene oxide; 1,2-epoxypropane; methyloxirane (CAS No.: 75-56-9)	n.d.	0.05	CC 1B; MC 1B
Diethyl sulphate (CAS No.: 64-67-5)	n.d.	0.05	CC 1B; MC 1B
Dimethyl sulphate (CAS No.: 77-78-1)	n.d.	0.05	CC 1B
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine (CAS No.: 143860-04-2)	n.d.	0.05	TRC 1B
Dinoseb (CAS No.: 88-85-7)	n.d.	0.05	TRC 1B
4,4'-methylenedi-o-toluidine (CAS No.: 838-88-0)	n.d.	0.05	CC 1B
4,4'-oxydianiline and its salts (CAS No.: 101-80-4)	n.d.	0.05	CC 1B; MC 1B
4-Aminoazobenzene; 4-Phenylazoaniline (CAS No.: 60-09-3)	n.d.	0.05	CC 1B
4-methyl-m-phenylenediamine (2,4-toluenediamine) (CAS No.: 95-80-7)	n.d.	0.05	CC 1B
6-methoxy-m-toluidine (p-cresidine) (CAS No.: 120-71-8)	n.d.	0.05	CC 1B
Biphenyl-4-ylamine (CAS No.: 92-67-1)	n.d.	0.05	CC 1A
o-aminoazotoluene (CAS No.: 97-56-3)	n.d.	0.05	CC 1B
o-Toluidine; 2-Aminotoluene (CAS No.: 95-53-4)	n.d.	0.05	CC 1B
N-methylacetamide (CAS No.: 79-16-3)	n.d.	0.05	TRC 1B
1-bromopropane (CAS No.: 106-94-5)	n.d.	0.05	TRC 1B
Pentadecafluorooctanoic acid (PFOA) (CAS No.: 335-67-1)	n.d.	0.05	TRC 1B & PBT
Ammoniumpentadecafluorooctanoate (APFO)*** (CAS No.: 3825-26-1)	n.d.	-	TRC 1B & PBT
Cadmium (Cd) (CAS No.: 7440-43-9)	n.d.	0.005	CC 1B & EQC
Cadmium oxide*** (CAS No.: 1306-19-0)	n.d.	-	CC 1B & EQC
DPP (Di-pentyl phthalate) (CAS No.: 131-18-0)	n.d.	0.05	TRC 1B
4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	n.d.	0.05	EQC

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



# Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 9 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



**Note :**

1. mg/kg = ppm; 0.1wt% = 1000ppm
2. n.d.= not detected = below Reporting Limit
3. RL = Reporting Limit
4. " - " = Not Regulated
5. (\*): conc. of Sodium dichromate dihydrate (CAS No.: 7789-12-0) = conc. of sodium dichromate × 1.1374
6. (\*\*): The concentrations of above-mentioned mixtures are evaluated per the gained composition rate between the selected marks and the mixtures.
7. (\* 1): Oligomers of chromic acid and dichromic acid : since the oligomers are made of the unknown amount of chromic acid or dichromic acid that results in no fixed molecular weight, therefore the monomer of chromic acid or dichromic acid is relevant and considered.
8. (\* 2): Tetraboron disodium heptaoxide, hydrate: Only anhydrous form of disodium tetraborate is relevant and considered according to ECHA explanation (Ref no.: INC 000000032519).
9. F Parameter Conversion Table : Please refer to [http://twap.sgs.com/V3attachment/News/N\\_20130415\\_1.pdf](http://twap.sgs.com/V3attachment/News/N_20130415_1.pdf)
10. Classification : Please refer to [http://twap.sgs.com/V3attachment/News/N\\_20130415\\_2.pdf](http://twap.sgs.com/V3attachment/News/N_20130415_2.pdf)
11. \*\*\*: The substance was calculated by the test results of Tributyl Tin, PFOA or element (Ex. Arsenic, Lead, Cr(VI), Boron, Cobalt, Barium, Cadmium respectively).

**The test result is given as:**

Substance Name	Concentration of Article (%)	RL (%)
Tributyl Tin (TBT)	n.d.	0.05
Arsenic (As)	n.d.	0.005
Lead (Pb)	n.d.	0.005
Hexavalent Chromium Cr(VI)	n.d.	0.005
Boron (B)	n.d.	0.005
Cobalt (Co)	n.d.	0.005

12. (※1): Regarding the compound containing arsenic and lead, lead and arsenic are tested and respectively used for the calculation of the independent concentration of the compound containing arsenic and lead. The minimum value of the two independently calculated concentrations is used as the final concentration for the report.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 10 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



13. (※3): TGIC is a mixture and also contains  $\beta$ -TGIC. According to the ECHA's technical dossier the ratio of  $\beta$ -TGIC to TGIC is around 1 to 10. Therefore  $\beta$ -TGIC is issued based on the above-mentioned ratio.
14. (※4): Only if both qualitative results of lead and silicon are positive, the test result of the compound will be calculated based on the concentration of barium.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

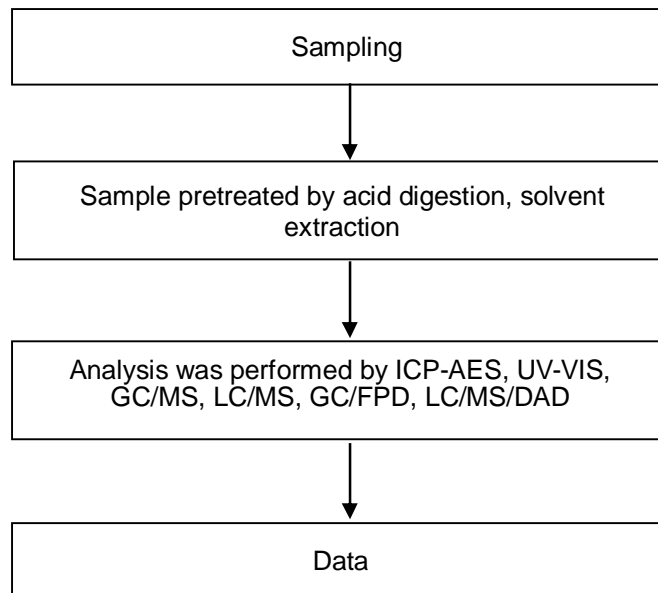
Page: 11 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



### Analytical flow chart of SVHC

- Name of the person who made measurement: Roman Wong / Stacy Chou / Climbgreat Yang
- Name of the person in charge of measurement: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## Test Report (SVHC)

No. : CC/2012/90065C

Date : 2013/07/10

Page: 12 of 12

CHUNG TAI SING CHEMICAL INDUSTRY CO., LTD.  
105, NIU PU SOUTH ROAD, HSINCHU, TAIWAN, R. O. C.



\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

### CC/2012/90065



SGSC12900650101

\*\* End of Report \*\*