

# Test Report

Report No.: RLSZB000280080002

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**Applicant** : SAMWIN SOUTH SCIENCE AND TECHNOLOGY CO.,LTD

**Address** : ROOM 2005,CYBER TIMES TOWER A,TIANAN CYBER PARK,FUTIAN DISTRICT,  
SHENZHEN

**Report on the submitted sample(s) said to be:**

Sample Name : MOSFET  
Sample Description : The mixture of black body and silver color metal pin  
Part No. : TO-251 TO-252  
Manufacturer : 南方芯源  
Sample Received Date : Aug. 6, 2009  
Testing Period : Aug. 6, 2009 to Aug. 11, 2009

**Test Requested** : As specified by client, to screen the fifteen substances of very high concern (SVHC) under Regulation(EC) No 1907/2006 of REACH, including Anthracene, 4,4'-Diaminodiphenylmethane, Dibutyl phthalate, Cobaltdichloride, Diarsenic pentaoxide, Diarsenic trioxide, Sodium dichromate, Musk-xylene, Bis(2-ethyl(hexyl)phthalate)(DEHP), Hexabromocyclododecane(HBCDD), Short Chain Chlorinated Paraffins, Bis(tributyltin)oxide, Lead hydrogen arsenate, Benzyl butyl phthalate, Triethyl Arsenate in the submitted sample.

**Test Method/Test Result(s)** : Please refer to the following page(s).

**Regulation Request** : Under REACH REGULATION(EC)No 1907/2006, suppliers of articles which contain SVHC in a concentration above 0.1% (w/w) have to provide sufficient information, to articles recipients, to a consumer within 45 days of the receipt of the request. This information must ensure safe use of the article and as minimum contain the name of the substance.

**Summary** : According to the analytical results, concentrations of 15 SVHC are less than 0.1% in the submitted sample, no obligation to communicate information under article 33 of REACH REGULATION.

Tested by \_\_\_\_\_

Inspected by Jed

Approved by \_\_\_\_\_

Date Aug. 11, 2009

Technical Manager

No. 10873554

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**Test Method:**

Substance Name(s)	Test Method	Measured Equipment(s)	Report Limit
Anthracene	Refer to US EPA 3550C:2007& US EPA 8270D:2007	GC-MS	0.005%
4,4' - Diaminodiphenylmethane	Refer to US EPA 8270D:2007	GC-MS	0.005%
Dibutyl phthalate(DBP)	Refer to ASTM D3421:1975	GC-MS	0.005%
Cobalt dichloride*	Refer to US EPA 3052:1996/ BS EN14582:2007	ICP-OES/IC	0.01%
Diarsenic pentaoxide*	Refer to US EPA 3052:1996	ICP-OES	0.01%
Diarsenic trioxide*	Refer to US EPA 3052:1996	ICP-OES	0.01%
Sodium dichromate*	Refer to US EPA 3052:1996/ US EPA 3060A:1996	ICP-OES/ UV-Vis	0.01%
Musk xylene	Refer to US EPA 3540C:1996	GC-MS	0.005%
Bis(2-ethyl(hexyl)phthalate)(DEHP)	Refer to ASTM D3421:1975	GC-MS	0.005%
Hexabromocyclododecane (HBCDD)	Refer to US EPA 3540C:1996	GC-MS	0.005%
Short Chain Chlorinated Paraffins (SCCPs)	Refer to US EPA 3540C:1996	GC-MS	0.01%
Bis(tributyltin)oxide (TBTO)*	Refer to US EPA 3052:1996/ Refer to DIN 38407:2003	ICP-OES/ GC-MS	0.005%
Lead hydrogen arsenate*	Refer to US EPA 3052:1996	ICP-OES	0.01%
Benzyl butyl phthalate(BBP)	Refer to ASTM D3421:1975	GC-MS	0.005%
Triethyl arsenate*	Refer to US EPA 3052:1996	ICP-OES	0.01%

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**Test Result(s):**

Substance Name(s)	CAS No.	EC No.	Concentration(%)	Classification
Anthracene	120-12-7	204-371-1	N.D.	PBT
4,4'- Diaminodiphenylmethane	101-77-9	202-974-4	N.D.	Carcinogen, cat. 2
Dibutyl phthalate(DBP)	84-74-2	201-557-4	N.D.	Toxic for reproduction, cat.2
Cobalt dichloride*	7646-79-9	231-589-4	N.D.	Carcinogen, cat.2
Diarsenic pentaoxide*	1303-28-2	215-116-9	N.D.	Carcinogen, cat.1
Diarsenic trioxide*	1327-53-3	215-481-4	N.D.	Carcinogen, cat.1
Sodium dichromate*	7789-12-0 /10588-01-9	234-190-3	N.D.	Carcinogen, cat.2 Mutagen, cat.2 Toxic for reproduction, cat.2
Musk xylene	81-15-2	201-329-4	N.D.	vPvB
Bis(2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	204-211-0	N.D.	Toxic for reproduction, cat.2
Hexabromocyclododecane (HBCDD)	25637-99-4/ 3194-55-6	247-148-4/ 221-695-9	N.D.	PBT
Short Chain Chlorinated Paraffins(SCCPs)	85535-84-8	287-476-5	N.D.	PBT,vPvB
Bis(tributyltin)oxide (TBTO)*	56-35-9	200-268-0	N.D.	PBT
Lead hydrogen arsenate*	7784-40-9	232-064-2	N.D.	Carcinogen, cat.1 Toxic for reproduction, cat.1
Benzyl butyl phthalate(BBP)	85-68-7	201-622-7	N.D.	Toxic for reproduction, cat.2
Triethyl arsenate*	15606-95-8	427-700-2	N.D.	Carcinogen, cat. 1

**Note:** -N.D. = Not Detected (<report limit)

**Remark:** \*Concentration value of Cobalt dichloride by the conversion from the test results of Cobalt and Chlorine.

Concentration value of Diarsenic pentaoxide, Diarsenic trioxide, Sodium dichromate, Bis(tributyltin)oxide, Lead hydrogen arsenate, Triethyl arsenate by the conversion from the test results of corresponding heavy metal.

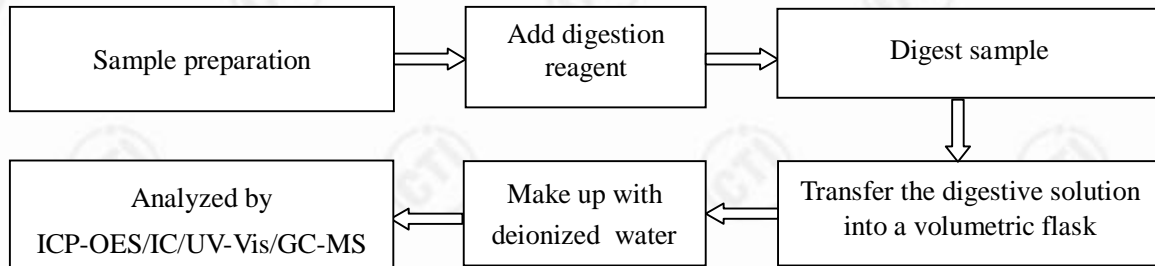
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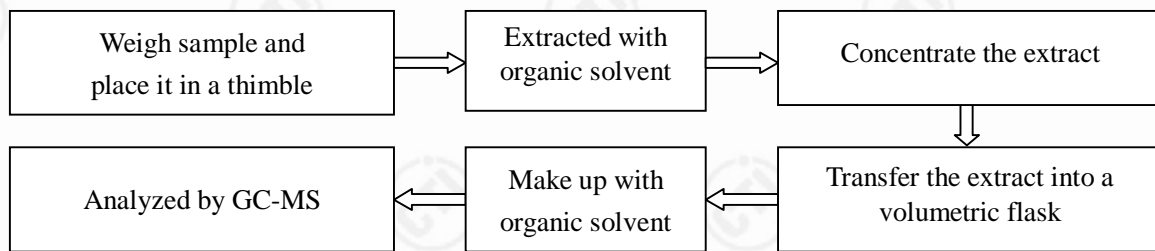
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**Test Process:**

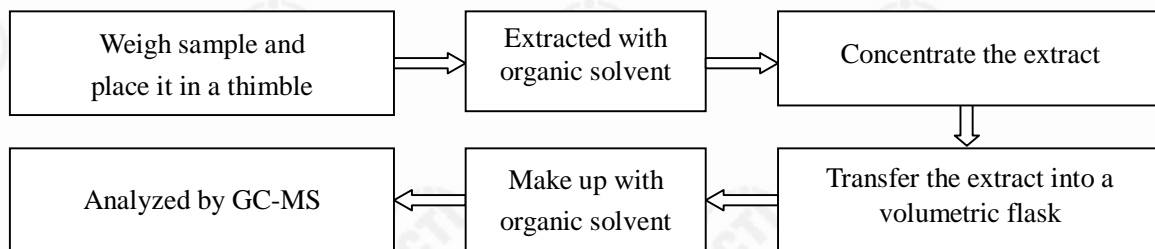
**1. Screen for Cobalt dichloride/Diarsenic pentaoxide/Diarsenic trioxide/Sodium dichromate/  
Bis(tributyltin)oxide/Lead hydrogen arsenate/Triethyl arsenate**



**2. Test for Anthracene Content**



**3. Test for 4,4'-diaminodiphenylmethane Content**

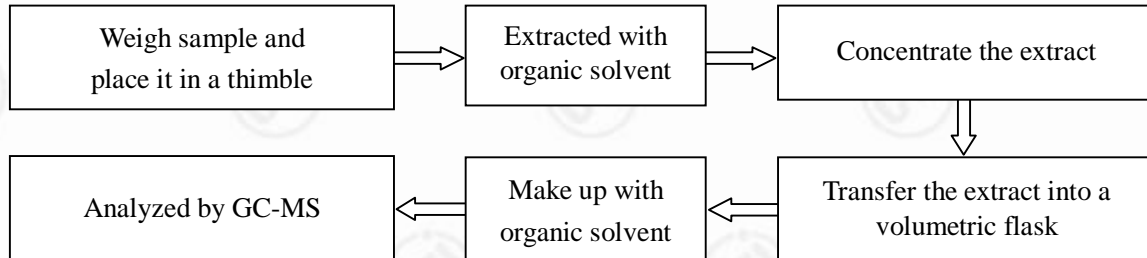


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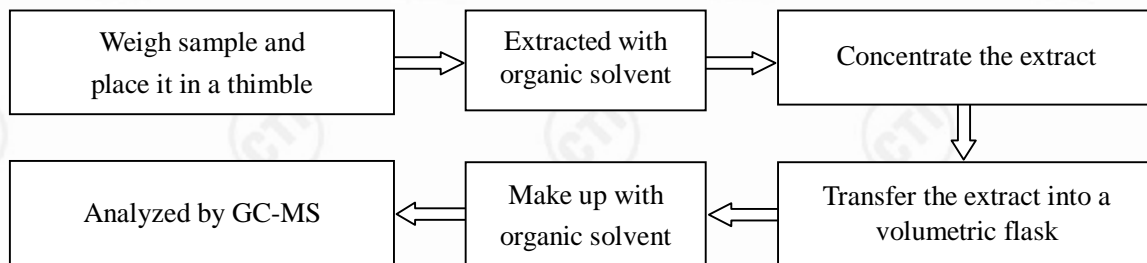
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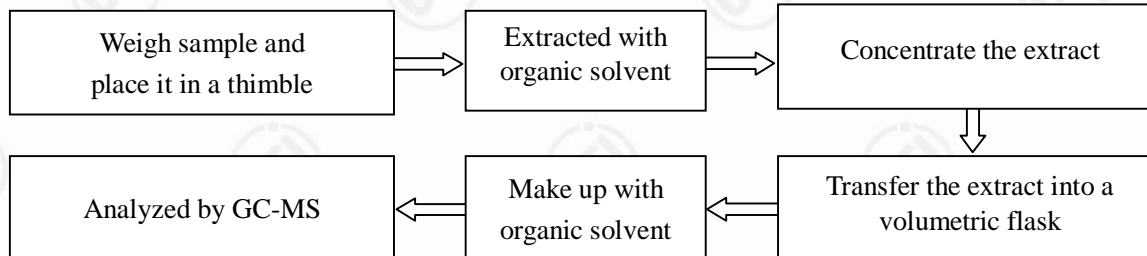
## 4. Test for Musk xylene/HBCDD Content



## 5. Test for SCCPs Content



## 6. Test for DBP/BBP/DEHP Content

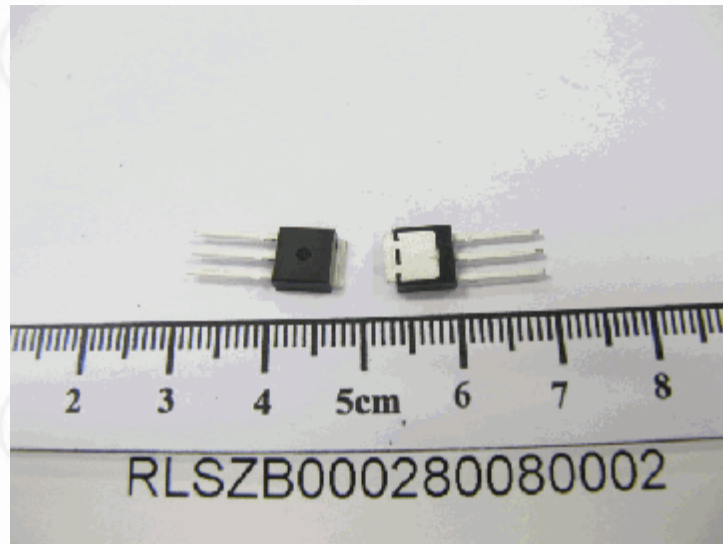


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## Photo of the sample



\*\*\* End of report \*\*\*

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