

**TEST REPORT**

Job No./Report No TR540792

Date:17 December 2013

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**AFS BORU SANAYI A S**

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To the attention of Betül Başkaya

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

Sample Submitted By : AFS BORU SANAYI A.S.  
Sample Description : Flexible Air Duct  
Article No. : Not Provided  
Model No. : PVCAFS  
PO / Order No. : Not Provided  
Reference No. : Not Provided  
Client : Not Provided  
End Use : Not Provided  
Sample Receiving Date : 2 December 2013  
Resubmit Date : 17 December 2013  
Testing Period : 2 December 2013 ~ 5 December 2013  
Service Type : NORMAL  
Test Requested : Selected test(s) as requested by client.  
Test Method : Please refer to next page(s)  
Test Result(s) : Please refer to next page(s)

Conclusion : Based on the performed tests on selected part of submitted samples, the results **comply with** the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.

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The test results relate to the tested items only.  
Test reports without SGS seal and authorized signatures are invalid.  
Reported results do not include uncertainties.  
In this Test Report tests marked (1) are included in the IAS Accreditation Scope of this Laboratory. Opinions and interpretations expressed herein are outside the scope of IAS Accreditation.

Issued in Istanbul  
Signed for and on behalf of  
SGS Supervise Gözetme Etüd  
Kontrol Servisleri A.Ş.

Ayşe Gönen  
Customer Services Team Leader

Bahar Bahar  
Non Food Customer Services Manager



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**Test Part Description :**

No.1: Grey plastic air duct

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## Flame Retardants ( ROHS)<sup>1</sup>

| Test Item(s):      | Unit  | Test Method  | Results  | MDL | Limit |
|--------------------|-------|--|----------|-----|-------|
|                    |       |  | <b>1</b> |     |       |
| <b>Sum of PBBs</b> | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | -   | 1000  |
| Monobromobiphenyl  | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Dibromobiphenyl    | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Tribromobiphenyl   | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Tetrabromobiphenyl | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Hexabromobiphenyl  | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Pentabromobiphenyl | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Heptabromobiphenyl | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Octabromobiphenyl  | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Nonabromobiphenyl  | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Decabromobiphenyl  | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |

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| Test Item(s):              | Unit  | Test Method  | Results  | MDL | Limit |
|----------------------------|-------|--|----------|-----|-------|
|                            |       |  | <b>1</b> |     |       |
| <b>Sum of PBDEs</b>        | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | -   | 1000  |
| Monobromodiphenyl ether    | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Dibromodiphenyl ether      | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Tribromodiphenyl ether     | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Tetrabromodiphenyl ether   | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Hexabromodiphenyl ether    | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Pentabromodiphenyl ether   | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Heptabromodiphenyl ether   | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Octabromodiphenyl ether    | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Nonabromodiphenyl ether    | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |
| Decabromodiphenyl ether ## | mg/kg | With reference to IEC 62321:2013, and performed by GC-MS | n.d.     | 5   | -     |

Note: (a) mg/kg = ppm ; 0.1wt% = 1000 ppm

(b) n.d.= not detected

(c)MDL = Method Detection Limit

(d) ## = The exemption of DecaBDE in polymeric application according 2005/717/EC was overruled by the European Court of Justice by its decision of 01.04.2013. Subsequently DecaBDE will be included in the sum of PBDE after 01.07.2013

(e) " - " = Not regulated

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## Heavy Metals (ROHS)<sup>1</sup>

| Test Item(s):              | Unit  | Test Method  | Results  | MDL | Limit |
|----------------------------|-------|--|----------|-----|-------|
|                            |       |  | <b>1</b> |     |       |
| Cadmium (Cd)               | mg/kg | With reference to IEC 62321-5:2013<br>(Determination of Cd by ICP-OES) | n.d.     | 2   | 100   |
| Lead (Pb)                  | mg/kg | With reference to IEC 62321-5:2013<br>(Determination of Pb by ICP-OES) | n.d.     | 2   | 1000  |
| Mercury (Hg)               | mg/kg | With reference to IEC 62321-4:2013<br>(Determination of Hg by ICP-OES) | n.d.     | 2   | 1000  |
| Hexavalent Chromium (CrVI) | mg/kg | -  | n.d.*    | 2   | 1000  |

Note: (a) mg/kg = ppm ; 0.1wt% = 1000 ppm

(b) n.d.= not detected

(c) MDL = Method Detection Limit

(d) \*= Test result for Chromium VI is considered as "n.d" since Total Chromium is not found by IEC 62321:2013 test method.

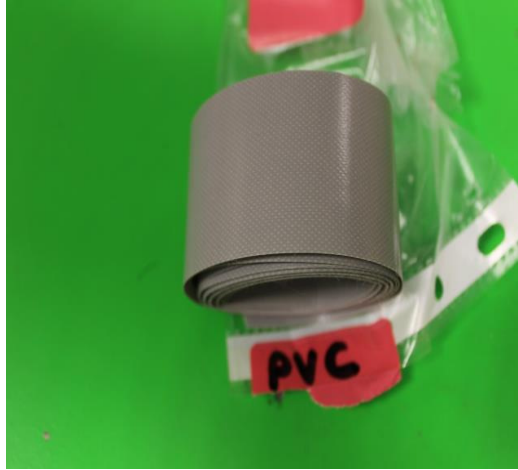
(e) " - " = Not regulated

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\* \* \*

End of Test Report

\* \* \*

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