



Applicant : HOANG CHAU PLASTIC JSC.

No.455, 27/4 St., Phuoc Hung Ward, Ba Ria City, Ba Ria -

Vung Tau Province, Vietnam

Contact Person : Vo Tuan Triet

Mail Box : trietvo@hoangchauplastic.com

Test Sample : Received on 28/05/2018

Test Period : From 28/05/2018 to 01/06/2018

Sample Description : PLASTIC (17mic lõi 0,2: 1.215 kg)

Color : TRANSPARENT

Product Type/End Use : Not applicable

Buyer : Not applicable

Manufacturer : Not applicable

Country Of Origin : Not applicable

Country Of Destination : Not applicable

Order No. : Not applicable

Season : Not applicable

Purpose of examination : In accordance with the Restriction of Hazardous Subtances

(RoHS) Directive 2011/65/EU, and its amendment directives

(1) Heavy Metals Content (Cadmium, Lead, Mercury, Hexavalent Chromium)

(2) Brominated Flame Retardants Content (PBBs & PBDEs)

(3) Phthalates (DEHP, DBP, BBP, DIBP)

Note: the submitted samples are Not Drawn by the Laboratory

Note: (1) General Terms & Conditions as mentioned overleaf, (2) The results relate only to the items tested, (3) the test report shall not be reproduced except in full without the written approval of the laboratory.

Disclaimer Measurement Uncertainty:

Unless otherwise agreed upon, Pass or Fail verdicts are given based on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/ICE 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as PASS nor as FAIL

Laboratory;
TÜV SÜD Vietnam Co. Ltd.
Lot III-26, 19/5A Street, Industry Group III,
Tan Binh I.P. Tay Thanh Ward, Tan Phu District,
Ho Chi Minh City, Vietnam

Phone:084-8-62678506 Fax:084-8-62678511 E-Mail:softlines-laboratory@tuv-sud.vn Url:www.tuv-sud.vn



Result summary/ Conclusion:

Test parameters	Conclusion	
Cadmium (Cd)	Pass	
Lead (Pb)	Pass	
Mercury (Hg)	Pass	
Hexavalent Chromium (Cr VI)	Pass	
Sum of PBBs	Pass	
Sum of PBDEs	Pass	
Bis-(2-Ethyl Hexyl) Phthalate (DEHP)	Pass	
Di-butyl Phthalate (DBP)	Pass	
Benzyl Butyl Phthalate (BBP)	Pass	
Di-iso-butyl Phthalate (DIBP)	Pass	



TÜV SÜD Vietnam TÜV SÜD Group

Tested by

Rajasekar Sheshadri

Assistant Manager - Physical Lab

Reviewed by

mel

Nguyen Thi Kim Chi Laboratory Manager



Description of the test subject

Sample	Picture	
Sample 1: PLASTIC (17mic lõi 0,2: 1.215 kg) Color: TRANSPARENT		TUV

2. Material analysis (As identified by lab)

Sample No.	Material	Color	Mat. No.
Sample 1	Pastic	Transparent	001





Test results

3.1 Heavy Metals Content (Cadmium, Lead, Mercury & Hexavalent Chromium)

With reference to IEC 62321-5:2013, determination of Cadmium and Lead in polymers and electronics by ICP-OES/ICP-MS

With reference to IEC 62321-4:2013, determination of Mercury in polymers, metals and electronics by ICP-OES/ICP-MS

With reference to IEC 62321-7-2:2017, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis and/or with reference to IEC 62321-5:2013, determination of Chromium by ICP-OES

Test Parameters	Unit	MDL	Result	RoHS
			001	Requirement
Cadmium (Cd)	mg/kg	2	ND	100
Lead (Pb)	mg/kg	2	ND	1,000
Mercury (Hg)	mg/kg	2	ND	1,000
Hexavalent Chromium (Cr VI)	mg/kg	2	ND	1,000

Note:

- mg/kg = milligram per kilogram
- 2. MDL = Method Detection Limit
- 3. ND = Not Detected (< MDL)
- 4. The result of Hexavalent Chromium (Cr (VI)) is deemed to be "ND" since the result of total chromium content is "ND", so testing of Hexavalent Chromium (Cr (VI)) is not required.
- 5. If the Chromium (Cr) content is greater than the MDL of Hexavalent Chromium (Cr (VI)), confirmation test Hexavalent Chromium (Cr (VI) is required.



3.2 Brominated Flame Retardants Content (PBBs & PBDEs)

With reference to IEC 62321-6:2015, determination of PBBs and PBDEs in polymers by GC-MS

Test Parameters	Result [mg/kg]	RoHS Requirements
rest raiameters	001	[mg/kg]
Monobromobiphenyl	N.D	
Dibromobiphenyl		
Tribromobiphenyl N.D Tetrabromobiphenyl N.D		
Pentabromobiphenyl	N.D	Sum: 1000
Hexabromobiphenyl		
Heptabromobiphenyl	N.D	
Octabromobiphenyl	N.D	
Nonabromobiphenyl	N.D	
Decabromobiphenyl	N.D	
Sum of PBBs	N.D	
Monobromobiphenyl ether	N.D	
Dibromobiphenyl ether	N.D	
Tribromobiphenyl ether	N.D.	
Tetrabromobiphenyl ether	N.D	
Pentabromobiphenyl ether	N.D	Sum: 1000
Hexabromobiphenyl ether		
Heptabromobiphenyl ether	N.D	
Octabromobiphenyl ether		
Nonabromobiphenyl ether	N.D	
Decabromobiphenyl ether	N.D	
Sum of PBDEs	N.D	

- - 1. N.D = Not Detected
 - 2. Reporting Limit = 5 mg/kg

3.3 Phthalates

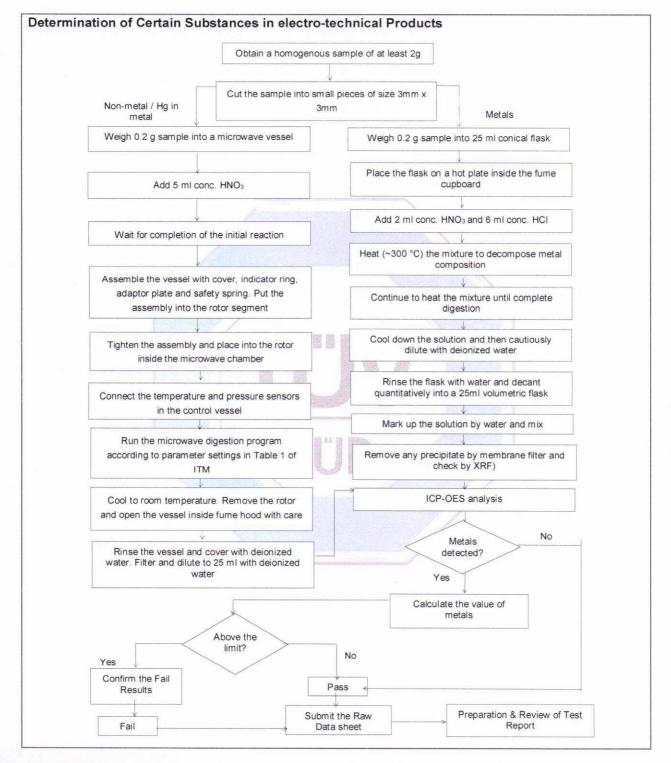
Reference to DIN EN 62321-8*VDE 0042-1-8:2014 and performed by GC-MS

Phthalates		Result [mg/kg]	RoHS	
	CAS No.	001	Requirements [mg/kg]	
Di-butyl Phthalate (DBP)	84-74-2	N.D		
Bis-(2-Ethyl Hexyl) Phthalate (DEHP)	117-81-7	N.D	F-1 1000	
enzyl Butyl Phthalate (BBP) 85-68-7		N.D	Each: 1000	
Di-iso-butyl Phthalate (DIBP)	84-69-5	N.D		
Note:				

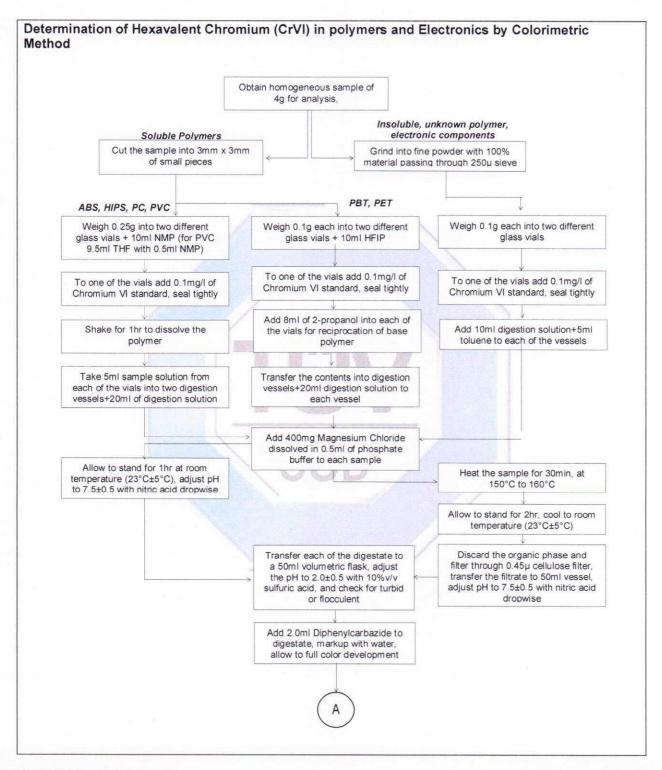
- 1. N.D = Not Detected
- 2. Reporting limit = 50 mg/kg

Vietnam

Test Report No. VNT/T(A)/18/002552 Dated 01/06/2018



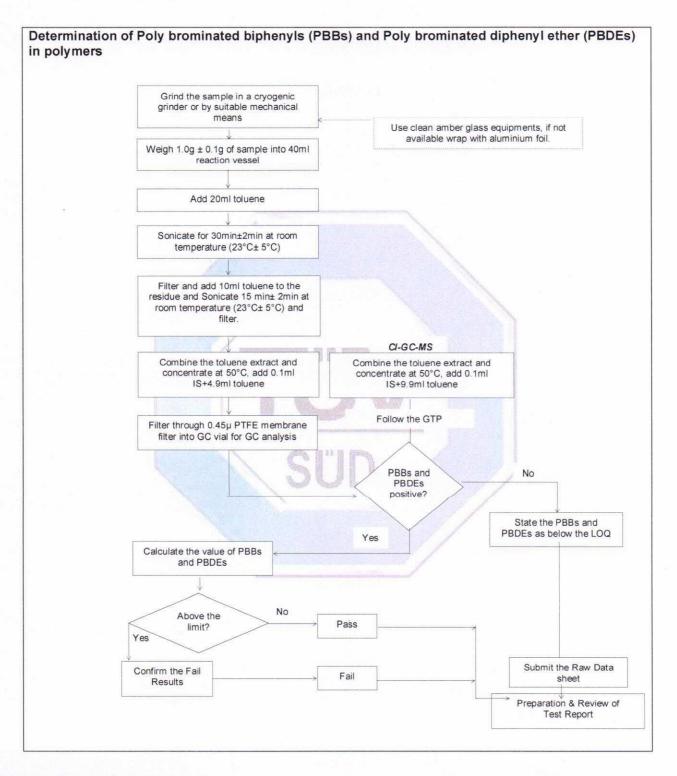




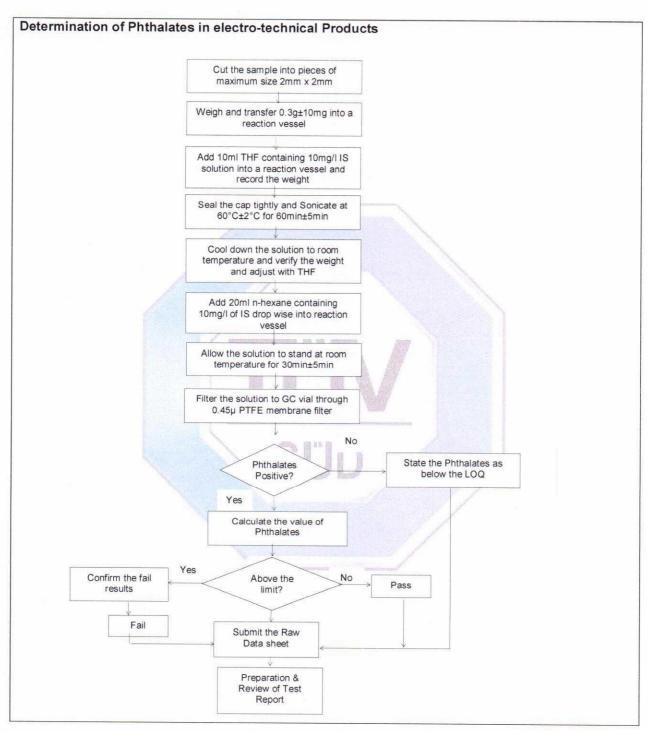


Determination of Hexavalent Chromium (CrVI) in polymers and Electronics by Colorimetric Method No Chromium VI positive? State the Chromium VI as Yes Calculate the value below the LOQ of Chromium VI Above the No Pass limit? Yes Fail Submit the Raw Data sheet Preparation & Review of Test Report









-- END OF TEST REPORT --



General Terms and Conditions of Business

of TÜV SÜD Vietnam Co., Ltd (hereinafter referred to as "TUV SUD")

- 1.1 General
 1.1 These General Terms and Conditions of Business are applicable to all Product Testing /
 1.1 These General Terms and Conditions of Business are applicable to all Product Testing /
 1.2 The client shall accept TDV SUD's General Terms and Conditions of Business and the
 prices vaid at the time of order placement. Deviating terms and conditions of business of individual
 clients cannot be recognized as a matter of principle.
 1.3 Ancillary agreements, promises and other statements by TÜV SÜD employees or officially
 authorized experts called in by TÜV SÜD shall only be considered binding if expressly con-firmed by
 TÜV SÜD and in witting. This shall also apply to any amendments to these terms and conditions.
 2. Contractual Performance and Clients' Responsibilities
 2.1 TÜV SÜD shall perform the Services in accordance to TÜV SÜD customary manner
 unless otherwise agreed in writing. Unless otherwise explicitly agreed in writing or regulated by the
 law and regulations, no responsibility shall be assumed for the correctness of the safety programs
 and safety regulation on which the tests and inspections have been based.
 2.2 TÜV SÜD shall be entitled to make use of sub-contractors in the implementation of the
 order only if this has been explicitly agreed upon in writing.

- 2.2 Tov SUD shall be entired to make use or sub-contractors in the implementation of the order only if this has been explicitly agreed upon in writing.

 2.3 The scope of the Services to be performed by TÜV SÜD shall be defined in writing on placement of order. If any modification or extension of the scope prove necessary within the context of due performance of the contract, they shall be additionally agreed upon in advance and in writing.

 2.4 The client shall supply the necessary accessories, information and / or documents, for the Services including any foreign test reports, company test reports, product specifications, catalogues and instruction manuals. Until all necessary accessories, information or documents are supplied, TÜN SÜD will not commence the Services. TÜV SÜD will not commence the Services
- TUV SUD, at its sole discretion, reserves the right not to undertake the Services and minate the agreement for the same in the event the clent fails to comply with the terms and notitions set out herein.

- Delay or Failure of Performance
 The deadlines for contractual performance quoted by TÜV SÜD shall be binding only if
- 13.1 The deadlines for contractual periormance quoted by IDV SUD shall be binding only if this has been explicitly agreed upon in writing or regulated by the law and regulations:

 3.2 TÜV SÜD shall not be liable for any delay or failure in respect of its contractual performance arising from any cause outside its control unless regulated by the law and regulations.

 3.3 In the event that TÜV SÜD's contractual performance is delayed due to any cause outside its control, TÜV SÜD shall have the option at its sole discretion to either (i) extend the period for performance in accordance to the period of delay or (ii) terminate the agreement for the Services.

 4. Warranty by TÜV SÜD only contractual periods with which it has been explicitly and the source contractual periods with which it has been explicitly and the source contractual periods with which it has been explicitly and the source contractual periods with which it has been explicitly and the source contractual periods with which it has been explicitly and the source contractual periods with which it has been explicitly and the source contractual periods with which it has been explicitly and the source contractual periods with which it has been explicitly and the source contractual periods with the source period of the source contractual periods with which it has been explicitly and the source contractual periods with the source period of the source contractual periods.
- performance in accordance to the period of delay or (ii) terminate the agreement for the Services.

 4. Warranty
 4.1 Warranty by TÜV SÜD only covers contractual services with which it has been explicitly commissioned as per Section 2.1. Warranty regarding the proper condition and overall functioning of the plants to which the inspected or tested parts belong shall therefore be excluded. In particular, TÜV SÜD shall not assume any responsibility for the desain, materials and construction of the examined plants unless these issues have been explicitly included in the contract. Even if the latter is the case, the warranty and the legal responsibility of the manufacturer shall be neither restricted nor assumed or regulated by the law and regulations.

 4.2 Any warranty given by TÜV SÜD shall initially be restricted to supplementary performance to be completed within a reasonable time limit informed in writing to and agreed by the oustomer or regulated by the law and regulations. Should such supplementary performance fall, i.e. be impossible or unacceptable for the customer or be unjustifiably refused or delayed by TÜV SÜD, the customer shall be entitled, at its discretion, either to a reduction of the price or rescission of the contract.

 4.3 TÜV SÜD warrants that it will exercise reasonable care and difigence in performing the service herein. Save as provided herein, all other warranties by TÜV SÜD, whether expressed or implied, are thereby expressly excluded.

 4.4 The clent warrants that all information and/or documents supplied to TÜV SÜD are accurate and correct in all aspects and shall indemnify TÜV SÜD as the recent law and regulations for all loss and damages arising from the Services herein caused by incorrect information and/or documents supplied by the cient.

 5. Lability

 5.1 Unless regulated by the law and regulations. TÜV SÜD shall only be liable for damages regulated of their legal basis if TÜV SÜD has caused any damage as a result of an intentional or

- documents supplied by the clent.

 5. Lability

 1. Lability

 5.1 Unless regulated by the law and regulations. TÜV SÜD shall only be liable for damages regardless of their legal basis IT TUV SÜD has caused any damage as a result of an intentional or grossly negligent act or if TÜV SÜD has negligently breached a substantial contractual obligation (material obligation). In the event that TÜV SÜD his in breach of any substantial contractual obligations (TÜV SÜD hall only be lable for the damage related to and typically foreseeable under the particular contract at the time of entering into the contract.

 5.2 Whits all reasonable care will be taken where the product / equipment is in TÜV SÜD's custody, unless otherwise silputed in the contract / agreement or regulated by the law and regulations. TÜV SÜD sall not under any circumstances be responsible for any loss or damage to the product / equipment during transit or while in the custody of TÜV SÜD, unless by fraud or negligence of TÜV SÜD. The client shall arrange for all necessary insurance against accidental loss or damage to the product / equipment, either in transit or at TÜV SÜD premises.

 5.3 Unless there is a wither nequest made for the return of the product / equipment at the time when they are delivered to TÜV SÜD for testing or the agreement for testing expressly provides for the return of the product / equipment, all product / equipment provided to TÜV SÜD for resting will be disposed after 1 month from the date of testing and the clent agrees this principal.

 5.4 Unless regulated by the law and regulations, TÜV SÜD shall not be liable for any damages caused as a result of a negligent breach of a non-substantial contractual obligations are those obligations that protect the customer's egal interests deemed to be substantial to the contract, which the contract, based on its content and purpose, must specifically grant to the customer. Further, such contractual obligations and upon the observance of which the customer has generally relied and may rely.

- may rely.

 5.6 Unless regulated by the law and regulations, TÜV SÜD shall not be liable for any incidental, indirect, special or consequential loss or damage whatsoever, including, but not limited to, loss of revenue, profits, contracts, business or anticipated savings, or loss of goodwill or reputation, whether foreseeable or not and whether arising from any act or omission on the part of TÜV SÜD in the provision of the Services.

- 5.7 Any person making claims under this contract may inform TÜV SÜD about any potential damage for which TÜV SÜD could be liable.

 5.8 If claims for damages against TÜV SÜD are excluded or limited, this shall extend to any personal liability of any statutory organs, experts, miscellaneous employees, vicarious agents or any other auxiliary personnel of TÜV SÜD for the said / same claims on the same legal relation.

 5.9 TÜV SÜD total liability to the client under or in connection with the agreement for Services and/or in tort (including negligence) in any event (other than death or personal injury resulting from TÜV SÜD is negligence) shall not exceed the amount of fees paid by the client to TÜV SÜD in respect of the Services.

- fespect of the Services.

 6. Terms of Payment, Prices
 6.1 Unless a fixed price or other calculation basis has been explicitly agreed upon, services shall be billed in accordance with the prices of TÜV SÜD valid at the time of contract conclusion. In the absence of a valid schedule of prices, contractual provisions must be agreed on a case-by-case

- basis.
 If there is a period of more than 4 months between placement of the order and completion of the order by TÜV SÜD and there has been a price increase in the meantime, then the modified price shall be used as the basis of calculation as of the 5th month.

 8.2. Reasonable advance payments may be requested and/or partial invoices covering services already rendered may be made out. Partial invoices need not be designated as such. The receipt of an invoice does not mean that the order has been billed completely by TÜV SÜD.

 8.3. Companies who are one of given any credit terms by TÜV SÜD have to pay in advance. For companies who are given credit terms by TÜV SÜD, an invoice will be issued when a job is completed and the fees shall be remitted to TÜV SÜD within thirty days of presentation of the invoice.

 8.4. The clent agrees to indemnify and pay TÜV SÜD for all taxes (Value Added Tax VAT), levised and duties including, but not limited to, goods and services tax or withholding tax which TÜV SÜD may be lable to pay as a result of providing the services to the clent herein.

 8.5. Any objections to invoices must be made in writing to TÜV SÜD within a 14-day preclusion
- They be sable to pay as a result or proving in the services to the chert herein.

 6.5 Any objections for invoices must be made in writing to TUV SDD within a 14-day preclusion period after receipt of invoice, with reasons stated.

 8.6 When a clent decides to cancel the order for the Services (other than audits), he may do so by giving a notice in writing to TÜV SÜD. In case TÜV SÜD receives the cancellation request within three working days after confirmation of the order, The clent will be charged for all Services performed prior to such cancellation and in vice versa, the client agrees to pay the full fee for the Services as the contract.

 8.7 For audits, any request for capacillation or prostrongment of the surfit must be given within
- 6.7 For audits, any request for cancellation or postponement of the audit must be given within six weeks in advance of the scheduled audit date, the client will be charged for all Services performed prior to such cancellation or postponement and in vice versa, the client agrees to pay the fulf lefe for the audit as the contract

- performed prior to such cancellation or postponement and in vice versa, the client agrees to pay the full fee for the audit as the contract

 7. Secrecy, Copyright, Data Protection

 7.1 TU SUD shall have the fight to copy and file any written documents submitted for perusal which are important for performance of the order.

 7.2 In as far as expert opinions, audit reports and the like that are protected by copyright are prepared within the scope of contractual performance, TUV SUD shall grant the customer a simple, non-transferable right of use, if this is required by the underlying purpose of the contract. This grant of copyright explicitly shall not include the transfer of any other rights; the customer shall in particular, not be entitled to change (process) or use expert opinions, audit reports, test results, calculations and the like outside its business.

 7.3 TUV SUD, its employees, and the expert engineers called in by TÜV SÜD shall not, without authorization, disclose or use any confidential information belonging to the client which they become cognizant during their activities provided that this clause shall not apply to information that is already known to TUV SÜD prior to such disclosure; or passes into the public domain otherwise than as a result of a breach of this confidentiality obligations or who did not acquire the information in confidence; or was independently conceived or developed by TÜV SÜD shall be entitled to a general lies on all intervity? enginement submitted for the Septices as the agreement contract with
- c. Lett in addition to any right of lien to which TÜV SÜD may be entitled by law. TÜV SÜD shall be entitled to a general lien on all product / equipment submitted for the Services as the agreement, contract with the clent.

- 9. Indemnity
 TÜV SÜD fully in accordance with the law and regulations against all loss or damages suffered and cost and expenses incurred by TÜV SÜD and all claims by any third parties as a result of provision of the Services (including but not limited to the improper use of the test reports, supply of inaccurate information and/or documents to TÜV SÜD or any claim by third party for infringement or intellectual property rights and/or for discovery of information and/or for delivery of documents or products / equipment) unless the same is caused by the act or neglect of TÜV SÜD.

 10. Court Appearance
- in the event any of the employees of TÜV SÜD is requested by the client or summoned by the court upon application by the client or any other parties for his attendance in court as an expert witness on the subject of the Services provided, the Client agrees and shall pay TÜV SÜD for such attendance in court based on TÜV SÜD's prevaiting rates, agreed by the writen confirmation of the client, for court attendance. TÜV SÜD may at its sole discretion revise its rates for court attendance from time to time.

 1. Governing Law

 1.1. The agreement for the Services shall be governed by and construct the services of the services shall be governed by and construct the services of the services shall be governed by and construct the services of the services shall be governed by and construct the services of the services shall be governed by and construct the services of the services shall be governed by and construct the services of the services shall be governed by and construct the services of the services of the services shall be governed by and construct the services of the services of the services of the services shall be given by the services of the servi

- TÜV SÜD and the client agree to submit to the jurisdiction of the Vietnam Courts
- 11.2 Validity of Agreement
 12. Validity of Agreement
 12. If any terms and conditions of this document are invalid or unenforceable for any reason, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of the terms and conditions.

effective: 21 January 2016 (TÜV SÜD Vietnam Co., Ltd.)