

Test Report No.: Page 1 of 11 178139376a 001

Out of the blue KG Client:

Beim neuen Damm 28 – 28865 Lilienthal Germany

Contact Person: Anthony Wong

# Sample Description As Declared:

No. Of Sample

: 100 Pcs

**Product Description** 

: FFP2 Face mask

Colour Model No. Lot No. Country of Origin

: 02/0004 : 29971

: White

: China

Test type

: Partial test

Sales Destination

: Europe(country name not provided)

Product type

: Single shift use only

Claimed classification

: FFP2 NR

Sample obtaining method:

Sending by customer

Sample Receiving date:

2020-04-20

**Delivery condition:** 

Apparent good, Samples tested as received

Test Period:

2020-04-21 to 2020-05-11

Test specification:

Test result:

Particulate respirator-half facepiece

EN 149:2001 + A1:2009 Respiratory protective devices - Filtering half masks

to protect against particles - Requirements, testing, marking^

Please refer to result page

For and on behalf of

TÜV Rheinland / CCIC (Qingdao) Co., Ltd.

2020-05-12

Alex Zhou / Senior Manager

Date

Name/Position

Test result is drawn according to the kind and extent of tests performed.

This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

Mershory



### **Material list**

Material	Color	Location
Textile	White	White folding mask

### Note:

	Shading shows the clauses requested
NRq	The clauses were not requested.
Pass	Requirement satisfied.
Ltd	Testing requested was insufficient completely to verify compliance with the clause. Refer to the "result details" section for more information.
Fail	Requirement not satisfied. Refer to the "result details" section for more information.
NAs	Assessment not carried out.
NAp	Requirement not applicable.
NT	Requested but not tested due to early termination following failure.

## Result:

EN 149:2001+A1:2009 Respiratory protective devices—Filtering half masks to protect against particles—Requirement, testing, marking.

7.4 Packaging PASS<sup>1</sup>

Particle filtering half masks shall be offered for sale packaged in such a way that they are protected against mechanical damage and contamination before use. Note 1: In accordance with the requirement.

7.5 Material PASS<sup>2</sup>

Materials used shall be suitable to withstand handling and wear over the period for which the particle filtering half mask is designed to be used.

After undergoing the conditioning described in 8.3.1 none of the particle filtering half masks shall have suffered mechanical failure of the facepiece or straps.

When conditioned in accordance with 8.3.1 and 8.3.2 the particle filtering half mask shall not collapse.

Any material from the filter media released by the air flow through the filter shall not constitute a hazard or nuisance for the wearer.

Note 2: In accordance with the requirement.

Specimens -92, -93, -94 were conditioned in accordance with 8.3.1, none of the specimens conditioned suffered mechanical failure or collapse.

Specimens -86, -87, -88 were conditioned in accordance with 8.3.2, none of the specimens conditioned suffered collapse.

# 7.6 Cleaning and disinfecting

If the particle filtering half mask is designed to be re-usable, the materials used shall withstand the cleaning and disinfecting agents and procedures to be specified by the manufacturer.

With reference to 7.9.2, after cleaning and disinfecting the re-usable particle filtering half mask shall satisfy the penetration requirement of the relevant class. Note 3: Single shift use only.

NAp<sup>3</sup>



# 7.7 Practical performance

PASS<sup>4</sup>

The particle filtering half mask shall undergo practical performance tests under realistic conditions.

Note 4: No imperfections.

Specimen and subject details:

Specimen	Subject
-95	TJ
-89	LCF

## 7.8 Finish of parts

Parts of the device likely to come into contact with the wearer shall have no sharp edges or burrs.

PASS<sup>5</sup>

Note 5: None of the specimens used in limited laboratory testing undertaken showed the evidence of sharp edges or burrs.

# 7.9.1 Total inward leakage(%)

PASS<sup>6</sup>

For particle filtering half masks fitted in accordance with the manufacturer's information, at least 46 out of the 50 individual exercise results (i.e. 10 subjects x 5 exercises) for total inward leakage shall be not greater than: 25% for FFP1, 11% for FFP2, 5% for FFP3.

And, in addition, at least 8 out of the 10 individual wearer arithmetic means for the total inward leakage shall be not greater than: 22% for FFP1, 8% for FFP2, 2% for FFP3.

Note 6: 46 out of the 50 individual exercise results were not greater than 11%; 8 of the 10 individual wearer arithmetic means were not greater than 8%. Detailed data are showed below.

Table 7.9.1-A Inward leakage test data

Test specification: EN149-2001 Clause 8.5

Subject	Sample No.	Condition	Walk(%)	Head Side/side(%)	Head Up/down(%)	Talk(%)	Walk(%)	Mean(%)
YZF	-01	A.R.	5.4	10.5	3.4	2.8	7.0	5.8
SM	-02	A.R.	3.6	6.8	6.0	5.3	4.2	5.2
LZM	-03	A.R.	3.7	7.5	5.0	3.0	2.0	4.2
JLX	-04	A.R.	2.9	7.3	8.3	9.5	8.2	7.2
YB	-05	A.R.	7.8	12.4	11.4	3.7	5.4	8.1
GJB	-06	T.C.	9.8	8.8	9.9	14.5	3.5	9.3
TS	-07	T.C.	2.9	11.5	8.5	4.4	3.5	6.2
ZMM	-08	T.C.	4.5	9.0	2.9	6.0	2.3	4.9
ZH	-09	T.C.	4.3	8.2	7.1	6.3	7.1	6.6
TLX	-10	T.C.	5.6	8.7	9.3	3.2	4.7	6.3
Maximum permitted 11				8				



Table 7.9.1-B Facial dimension

Subject	Face Length(mm)	Face Width(mm)	Face Depth(mm)	Mouth Width(mm)
ZMM	114	157	119	50
GJB	109	154	109	57
YZF	113	151	106	48
TS	97	146	102	51
YB	112	150	119	66
SM	116	144	109	49
ZH	102	152	113	55
JLX	119	152	109	59
TLX	104	153	112	40
LZM	118	157	124	44

# 7.9.2 Penetration of filter material

**PASS** 

The penetration of the filter of the particle filtering half mask shall meet the requirements of below:

Classification	Sodium chloride test 95	Paraffin oil test 95
	l/min,%,Max	l/min,%,Max
FFP 1	20	20
FFP 2	6	6
FFP 3	1	1



Table 7.9.2- Penetration of filter material

Test specification: EN149-2001 Clause 8.11

	on: EN149-2001 Clause &	Sample	Penetra	ation (%)	
Aerosol	Condition	No.	After 3 minutes	Max. during exposure	Assessment
		-11	0.47		
	A.R.	-12	1.05		
		-13	1.32		
Sodium		-61	1.32		
chloride	S.W.	-62	0.56		
test		-63	0.98		
		-39	0.92	1.63	
	M.S. + T.C.	-40	1.48	2.07	
		-41	1.11	1.49	
		-14	3.48		
	A.R.	-15	2.61		PASS
		-16	2.92		
	S.W.	-64	2.50		
Paraffin oil test		-65	3.06		
		-66	2.87		
		-42	3.14	3.60	
	M.S. + T.C.	-43	3.53	4.98	
		-44	2.99	3.47	
Maximum permitted			6		
Flow conditioning: Single filter: 95.0 L/min					



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# 7.10 Compatibility with skin^

PASS 7

Materials that may come into contact with the wearer's skin shall not be known to be likely to cause irritation or any other adverse effect to health.

Note 7: Specimens from -17 to -21 (A.R.) and from -45 to -49 (T.C.) were tested. No irritation or any other adverse effect to health.

# 7.11 Flammability<sup>^</sup>

**PASS** 

When tested, the particle filtering half mask shall not burn or not to continue to burn for more than 5 s after removal from the flame.

Table 7.11- Flammability

Test specification: EN149-2001 Clause 8.6

Condition	Sample No.		
A D	-27	Burn for 0.8 s	
A.R.	-28	Burn for 0.7 s	DACC
T.C.	-29	Burn for 0.4 s	PASS
	-30	Burn for 0.5 s	

# 7.12 Carbon dioxide content of the inhalation air^

**PASS** 

The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1,0 % (by volume).

Table 7.12- Carbon dioxide content of the inhalation air

Test specification: EN149-2001 Clause 8.7

Condition	Sample Result Asset		Assessment
	-31	0.37%	
A.R.	-32	0.36%	PASS
	-33	0.38%	PASS
Maximum permitted		1.0%	

### 7.13 Head harness<sup>^</sup>

PASS<sup>8</sup>

The head harness shall be designed so that the particle filtering half mask can be donned and removed easily.

The head harness shall be adjustable or self-adjusting and shall be sufficiently robust to hold the particle filtering half mask firmly in position and be capable of maintaining total inward leakage requirements for the device.

Note 8: Specimens from -22 to -26 (A.R.) and from -50 to -54 (T.C.) were tested. Head harness can be donned and removed easily, adjustable or self-adjusting, and have sufficiently robust to hold the face mask firmly. The product satisfy the total inward leakage requirements. See 7.9.1 for results.

# 7.14 Field of vision<sup>^</sup>

PASS 9

The field of vision is acceptable if determined so in practical performance tests. Note 9: Specimens from -34 and -35 (A.R.) were tested. Pass the practical performance tests and no adverse comments.



# 7.15 Exhalation valve<sup>^</sup>

NAp

A particle filtering half mask may have one or more exhalation valve(s), which shall function correctly in all orientations.

If an exhalation valve is provided it shall be protected against or be resistant to dirt and mechanical damage and may be shrouded or may include any other device that may be necessary for the particle filtering half mask to comply with 7.9.

Exhalation valve(s), if fitted, shall continue to operate correctly after a continuous exhalation flow of 300 l/min over a period of 30 s.

When the exhalation valve housing is attached to the faceblank, it shall withstand axially a tensile force of 10 N applied for 10 s.

# 7.16 Breathing resistance^

PASS 10

	Maximum permitted resistance (mbar)				
Classification	inhal	inhalation			
	30 l/min 95 l/min		160 l/min or (25 cycles/min x 2.0 l/stroke)		
FFP1	0,6	2,1	3,0		
FFP2	0,7	2,4	3,0		
FFP3	1,0	3,0	3,0		

Note 10: FFP2 Filtering face mask. Test result are shown in below Table.



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Table 7.16 Breathing resistance (mbar)

Test specification: EN149-2001 Clause 8.9

	ilication. Livings	Inhalation resistance(mbar)		Exhalation resistance(mbar)					
Specimen Condition	Condition	At 30 I/min	41.05.1/	Breathing machine(25 cycles/min x 2.0 l/stroke )					
			At 95 I/min	Α	В	С	D	E	
-36		0.24	0.89	2.04	2.01	2.06	2.01	1.98	
-37	A.R.	0.25	0.92	2.11	2.08	2.09	2.06	2.08	
-38		0.25	0.91	2.09	2.14	2.12	2.08	2.13	
-55		0.25	0.93	2.01	2.01	1.98	1.94	2.03	
-56	T.C.	0.25	0.94	1.96	1.94	1.94	1.93	1.98	
-57		0.22	0.89	1.91	1.94	1.92	1.98	1.92	
-58		0.23	0.85	1.96	1.97	1.92	1.94	1.93	
-59	S.W.	0.22	0.82	2.14	2.09	2.12	2.08	2.11	
-60		0.25	0.91	2.20	2.09	2.13	2.12	2.11	
	A.R. + F.C.								
	T.C. + F.C.								
	1.0. + 1.0.								
Maximum permitted 0.7 2.4 3.0									

the right side.

A: facing directly ahead; B: facing vertically upwards; C: facing vertically downwards; D: lying on the left side; E: lying on

# 7.17 Clogging<sup>^</sup> 7.17.2 Breathing resistance

Valved particle filtering half masks:

After clogging, the inhalation resistances shall not exceed:

FFP1: 4 mbar, FFP2: 5 mbar, FFP3: 7 mbar at 95 l/min continuous flow.

The exhalation resistance shall not exceed 3 mbar at 160 l/min continuous flow.

Valveless particle filtering half masks:

After clogging the inhalation and exhalation resistances shall not exceed:

FFP1: 3 mbar, FFP2: 4 mbar, FFP3: 5 mbar at 95 l/min continuous flow.

# 7.17.3 Penetration of filter material

All types(valved and valveless)of particle filtering half masks clained to meet the clogging requirement shall also meet the requirements given in 7.9.2,for the Penetration test according to EN13274-7,after the clogging treatment. Note 11: Single shift use only.

# 7.18 **Demountable parts^**

NAp 12

NRq 11

All demountable parts (if fitted) shall be readily connected and secured, where possible by hand.

Note 12: No demountable parts were used.



9 Marking<sup>^</sup> NRq

# 9.1 Packaging

The following information shall be clearly and durably marked on the smallest commercially available packaging or legible through it if the packaging is transparent.

- **9.1.1** The name, trademark or other means of identification of the manufacturer or supplier.
- 9.1.2 Type-identifying marking.
- 9.1.3 Classification

The appropriate class (FFP1, FFP2 or FFP3) followed by a single space and then: "NR" if the particle filtering half mask is limited to single shift use only. Example: FFP3 NR, or "R" if the particle filtering half mask is re-usable. Example: FFP2 R D.

- **9.1.4** The number and year of publication of this European Standard.
- **9.1.5** At least the year of end of shelf life. The end of shelf life may be informed by a pictogram as shown in Figure 12a, where yyyy/mm indicates the year and month.
- **9.1.6** The sentence 'see information supplied by the manufacturer', at least in the official language(s) of the country of destination, or by using the pictogram as shown in Figure 12b.
- **9.1.7** The manufacturer's recommended conditions of storage (at least the temperature and humidity) or equivalent pictogram, as shown in Figures 12c and 12d.
- **9.1.8** The packaging of those particle filtering half masks passing the dolomite clogging test shall be additionally marked with the letter "D". ID This letter shall follow the classification marking preceded by a single space.

## 9.2 Particle filtering half mask<sup>^</sup>

Particle filtering half masks complying with this European Standard shall be clearly and durably marked with the following:

- **9.2.1** The name, trademark or other means of identification of the manufacturer or supplier.
- **9.2.2** Type-identifying marking.
- **9.2.3** The number and year of publication of this European Standard.
- **9.2.4** Classification

The appropriate class (FFP1, FFP2 or FFP3) followed by a single space and then: "NR" if the particle filtering half mask is limited to single shift use only. Example: FFP3 NR, or "R" if the particle filtering half mask is re-usable. Example: FFP2 R D.

**9.2.5** If appropriate the letter D (dolomite) in accordance with clogging performance. This letter shall follow the classification marking preceded by a single space (see 9.2.4).

Example FFP3 NR D, FFP2 R D.

**9.2.6** Sub-assemblies and components with considerable bearing on safety shall be marked so that they can be identified.



### 10 Information to be supplied by the manufacturer^ NRq Information supplied by the manufacturer shall accompany every smallest 10.1 commercial available package. 10.2 Information supplied by the manufacturer shall be at least in the official language(s) of the country of destination. 10.3 The information supplied by the manufacturer shall contain all information necessary for trained and qualified persons on: application/limitations; the meaning of any colour coding; checks prior to use; donning fitting; use; maintenance(e.g. cleaning, disinfecting), if applicable; storage; the meaning of any symbols/pictograms used of the equipment. 10.4 The information shall be clear and comprehensible. If helpful, illustrations, part numbers, marking shall be added. Warning shall be given against problems likely to be encountered, for example: 10.5 fit of particle filtering half mask (check prior to use); it is unlikely that the requirements for leakage will be achieved if facial hair passes under the face seal; air quality (contaminants, oxygen deficiency); use of equipment in explosive atmosphere.

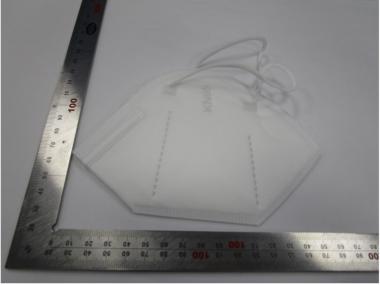
- 10.6 The information shall provide recommendations as to when the particle filtering half mask shall be discarded.
- 10.7 For devices marked "NR", a warning shall be given that the particle filtering half mask shall not be used for more than one shift.

**Remark:** "^" indicates that the test is sub-contracted to the lab China Academy of Safey Science and Technology which complies with the requirement of ISO/IEC 17025:2017, the registration No. CNAS L0118.



# Photo:





- END -

## General Terms and Conditions of Business of TÜV Rheinland in Greater China

- (ii)
- Scope
  These General Terms and Conditions of Business of TUV Rheinland in Greater Chinis (VTCEP) is made between the client and one or more member entities of TUV Rheinland in Greater Chinis (VTCEP) is made between the client and one or more member entities of TUV Rheinland in Greater Chinis and guideline as the case may be ("TUV Rheinland"). The Greater Chinis hereof refers to Maniland China, Heng Kong and Taiwan. The client hereof includes:
  a natural person capable to form legally brinding contrastes under the applicable laws who concludes the centrate rate for the purpose of adaly use, the incorporated or unincorporated entity duly or gazinezed, validity existing and capable to form legally brinding contrasts under the applicable law. Expenditure of the contrast of the contrast performance. Any standard terms and conditions of the client of any nature shall not apply and shall hereby be expessly excluded. No standard contrast and terms and condition of the client of any nature shall not apply and shall hereby be expessly excluded. No standard contrast unterms and condition of the client of any nature shall not apply and shall hereby be expessly excluded. No standard contrast unterms and condition of the client of any nature shall not apply and shall hereby be excessly excluded. No standard contrast unterms and condition of the client of any nature shall not apply and shall hereby be excessly excluded. No standard contrast unterms and condition of the client of any nature shall not apply and shall been by the expessly excluded. No standard contrast unterms and condition of the client of any nature shall not apply and shall been by the expessly excluded. No standard contrast unterms and condition of the client of any nature shall not apply and shall been be excessly excluded. No standard contrast unterms and condition of the client of any nature shall not apply and shall been be excessly excluded. No standard contrast unterms and condition of the client of any auture shall not apply and shall be not apply and s

### Quotations

Unless otherwise agreed, all quotations submitted by TÜV Rheinland can be changed by TÜV Rheinland without notice prior to its acceptance and confirmation by the other party.

- Coming into offect and duration of contracts:

  The context shall come into effect for the agened terms upon the quotation letter of TOV Rheinland come into effect for the agened terms upon the quotation letter of TOV Rheinland who works respected by the client being earlied by both contracting parties, or upon the works respected by the client being earlied on by TOV Rheinland (11 the client instructs TOV Rheinland without receiving a quotation from TOV Rheinland quotation, 17 UN Reinland quotestine, entitled to the client instructs of the client instructs and the contract term shall be contract term shall be contract term with a client client instructs and the contract term will the contract terms of the contract term will the contract terms of the contract term will be contract the contract the contract the contract term will be contract the contract the
- 3.3

- confirmation of order by TÜV Rheinland shall be decisive for the service is be provided.

  The agreed services shall be performed in compliance with the regulations in force at the time the contract is entered ain.

  TÜV Rheinland is entitled to determine, in it so de discretion, the nethod and nature of the assessment unless otherwise agreed in writing or if mandatory provisions.

  On execution of the work there shall be no simultaneous assumption of any guarantee of the correctness (repore quality) and working order of either tested or examined parts nor of the installation as a whole and its upstream and/or examined parts nor of the installation is asked in the pricular. TOR Rheinland shall assume no responsibility for the construction, selection of materials and assembly of intrallations carried nor for their treat and perjection in accordance with regulations, nor done for their treat and perjectation in accordance with regulations, unless these questions are expressly covered by the contract.
- contract.

  In the case of inspection work, TÜV Rheinland shall not be responsible for the accuracy or checking of the safety programmes or safety regulations on which the inspections are based, unless otherwise expressly agreed in writing, support services are sometimes of the contract, with a written notice to the clear, TÜV Rheinland shall be entitled to additional remuneration for resulting additional expenses.

- The contractually agreed periods/dates of performance are based on estimates of work involved which are prepared in line with the details provided by the client. They shall only be binding if being confirmed as binding by TÜV Rheinland in

- They shall only be binding if being confirmed as binding by TÜV Rheinland in writing.

  If binding periods of performance have been agreed, these periods shall not commence until the client has submitted all required documents to TÜV Rheinlan Articles 5.1 and 5.2 also apply, even without capters approval by the client, to all Articles 5.1 and 5.2 also apply, even without capters approval by the client, to all Rheinland is not recompressible for a dolly in performance, in particular if the client on fat fulfilled his duties to cooperate in accordance with clause 6.1 or has not done in time and, in particular, has not provided TÜV Rheinland with all documents an information required for the performance of the service as specified in the contras performance of TUV Rheinland in cliently dute to unforsees other circumstances was a force majoure, strikes, business disruptions, governmental regulations, transpas obstacles, etc., TÜV Rheinland in cellulo to postpone performance for a reassual period of time which corresponds at least to the duration of the hindrance plus any time period which may be required to coursup reformance.

### The client's obligation to cooperate

- Design documents, supplies, auxiliary staff, etc. necessary for performance of the services shall be made available free of charge by the client. Moreover, collaborative action of the client must be undertaken in accordance with legal provisions, standards, safety regulations and accident prevention instructions. And the client represents and warrants that

### a) it has required statutory qualifications:

- b) the product, service or management system to be certified complies with applicable laws and regulations; and
- it doesn't have any illegal and dishonest behaviours or is not included in the list of Enterprises with Serious Illegal and Dishonest Acts of People's Republic of China.
- The client shall bear any additional cost incurred on account of work having to be redone or being delayed as a result of late, incorrect or incomplete information provided by or lack of proper cooperation from the client. Even where a fixed or maximum price is agreed, TUV Rheinland shall be entitled to charge extra frees for such additional expense.

- 7.3
- vork. If the execution of an order extends over more than one month and the value of the contract or the agreed fixed price exceeds £2,500.00 or equivalent value in local currency, TÜV Rheinland may demand payments on account or in instalments.

- 8.3
- Payment terms

  All invoice amounts shall be due for payment without deduction on receipt of the invoice. No discounts and rebutes shall be granted.

  Payments shall be made to the bank account of TUV Rheimland as indicated on the invoice, and client numbers.

  In cases of default of apyment, TUV Rheimland shall be entitled to claim default interest at the applicable short term losn interest rate publicly amounced by a reputable commercial bank in the county where TUV Rheimland is located. All the same time, TUV Rheimland reserves the right to claim further damages. Should the cleim default payment of the movice despite being granted arranged to the contract of the payment of the review despite being granted for the payment of the payment of the payment of the payment of the proper despite of the payment of
- performance of the contract.

  The provisions set forth in article 8.4 shall also apply in cases involving returned cheques, cessation of payment, commencement of insolvency proceedings against

- use curse a sasets or cases in which the commencement of insolvency proceedings has been dismissed date to lack of saces. Objections to the invoices of TOV Rheinland shall be submitted in writing within two weeks of necipit of the invoice. TOV Rheinland shall be entitled to mean appropriate advance payments. TOV Rheinland shall be entitled to terms for feer at the beganning of a month if TOV Rheinland shall be entitled to trans its fees at the beganning of a month if a month of the state of the

- 9.4If ac
- Acceptance of work

  Any part of the work result ordered which is complete in itself may be presented by TUV Reinsland for acceptance as an instalment. The client shall be obliged

  If acceptance is required or contractably agend an an individual case, this shall be deemed to have taken place two (2) weeks after completion and handover of the work, unless the client refuses acceptance within this perol's stating at least one client is not entitled to refine acceptance is excluded according to the nature of the work performance of TUV Reinsland, so the completion of the work shall take to place.

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- 10. Confidentiality

  10. IFor the purpose of these terms and conditions, "confidential information" means all images are supported to the purpose of these terms and conditions," confidential information" means all images are supported in the purpose of these terms and conditions, "confidential information" means all informations documents, images, drawings, know-lows, data, samples and reject documentation which one party (the "citaclosing party") hands over, transfers or otherwise discloses to the other party (the "citaclosing party") hands over, transfers or otherwise discloses to the other party (the "citaclosing party") hands over, transfers or otherwise discloses to the other party (the "citaclosing party") hands includes paper consequence of sorts of the confidential information is expressly not the data and know-how collected, compiled or therwise obtained by TUV Reinitand (including the confidential information is expressly not the data and know-how collected, compiled or therwise obtained by TUV Reinitand (incomponent) within the provision of services. The confidential information is expressly not the data and know-how collected, compiled or therwise obtained by TUV Reinitand (incomponent) within the provision of services.

  10.2 The disclosing party hall party and in confidential information is declosed in written and the confidential information and the confidential information is declosed orally, the receiving party hall be confidentially statute of the disclosing party hall confirm in writing the confidentially statute of the graph of the confidential information is declosed orally, the receiving party and which is created during performance of word by the confidential information which is declosing party transmits or otherwise.

  10.3 All confidential information which the declosing party transmits or otherwise and the disclosing party and which is created during performance of word by many and the confidential information which is declosing party; may be used by the receiving party that purposes o

- clause. Information for which the receiving party can furnish proof that: it was generally known at the time of disclosure or has become general knowled without violation of this confidentially clause by the receiving party, or it was disclosed to the receiving party by a third party entitled to disclose this information; or the receiving party already possessed this information prior to disclosure by the

- information; or the receiving party already possessed this information prior to disclosure by the disclosing party; or disclosure by the disclosing party; and not be described it itself, irrespective of disclosure by the disclosing party; all not be described to itself, irrespective of disclosure by the disclosing party; all not be descended constitute; confideratial information and into confideratial tyclosure, and confideratial information that remain the property of the disclosing party. The All confideratial information is confideratial information, including all copies, so the disclosing party, and sor (i) on request by the disclosing party, to destroy all confideratial information, including all copies, and confift the destruction of this confideratial information to the disclosing party in writing, at any request after termination or extry of the orienter. But all the confideratial information to the disclosing party in writing, at any request after termination or extry of the orienter. But all the confideratial information or extry of the orienter. But all the confideratial horizontal confideratial information or extry of the orienter. But all the confideratial horizontal information or extra this confideratial formation or extra this confideration and confideratial formation or extra this confideration and confideratial information and shall not disclose this information to any third parties or use at for itself.

### Copyrights and rights of use, publications

- Copyrights and rights of use, publications

  I'U Rehinda bull critical all exclusive copyrights in the reports, expert reports/enjimions, test reports/essils, results, calculations, presentations set; reports by TU Rehinda undersical greater to the reports in a separate agreement. As the owner of the copyright, TUV behindand in feet to grant others agreement. As the owner of the copyright, TUV behindand in feet to grant others to the region of the
- 11.3The tra
- presentations etc. prepares warms in a sogo on to consequent agreed purpose.

  sfer of right of use of the generated work results regulated in clause 11.2. of the GTCB is subject to full payment of the remuneration agreed in favour of TCV Rheninach is subject to full payment of the remuneration agreed in favour of TCV Rheninach in the seven results in full unless TCV Rheninach and given its prior written consects the work results for a full rules TCV Rheninach and given its prior written consects the partial passing on of work results.

  Any publication or duplication of the work results for absenting purposes or any further use of the work results keyoud the scope regulated incluse 11.2 needs the prior written approval of TCV Rheninach in each individual case.
- prior written approval of TÜV Rheinland in each individual case, einland may revoke a once given approval according to clause 11.5 at any time without stating reasons. In this case, the client is obliged to stop the transfer of the work results immediately at his own expense and, as far as possible, to withdraw
  - work results immediately at his own expense and, as far as possible, to withdraw publications. sent of TÜV Rheinland to publication or duplication of the work results does not entitle the client to use the corporate logo, corporate design or test/certification of TÜV Rheinland.

## Liability of TÜV Rheinland

- equivalent amount in local currency, the total and accumulated liability of TÜV Rheinland shall be only limited to and shall not exceed the said 2.5 Million Furo or
- Rheinland shall be only limited to and shall not exceed the said 2.5 Million Euro or equivalent amount in local currency.

  The limitation of liability according to article 12.1 above shall not apply to damage and or losses caused by malice, intent or goes negligance on the part of TUV.

  Rheinland or its vicarious agents. Such limitation shall not apply to damages for a local content of the part of t
- forescended damages), unless any of the circumstances described in article 12.2 arguments, and all and two kables for the acts of the personan make available by the client to support TOV Rheinland in the performance of its services under the contract, unless such personand made available to regarded as vicarious agent of TOV Rheinland. IrTUV Rheinland is not liable for the acts of the personand made available to regarded as vicarious agent of TOV Rheinland against any claims made by third parties arising from or in connection of the contract of the contract of the contract to the client. The third parties arising from or in connection of the contract to the client. The limitation periods for claims for damages shall be based on statutory provisions. None of the provisions of this article 12 changes the burden of proof to the disadvariang of the client.

- 13. Export Contract

  13. When passing on the services provided by TÜV Rheinland or parts thereof to third parties in Greater China or other regions, the client must comply with the respectively applicable regulations of anional and international export control law.

  13.2The performance of a contract with the client is subject to the provise that there are no other contracts the performance of a contract with the client is subject to the provise to that there are no include the contract with immediate eligibilities embargos and/or sanctions. In the event of a violation, TÜV Rheinland shall be entitled to terminate the contract with immediate effect and the client shall compensate for the losses incured thereof by TÜV Rheinland.

  \*\*Part on other time of the contract with immediate effect and the client shall compensate for the losses incured thereof by TÜV Rheinland.

Data protection notice

Neherland processes personal data of the client for the purpose of fulfilling his contract. In addition, TUN Rheinland also processes the data for other legal purposes in accordance with the relevant legal basis. The personal data of the client will only be disclosed to other nutural or legal persons of the data of the client will only be disclosed to other nutural or legal persons. If the personal data will be defined immediately as soon as a corresponding reason for detection arises. Data subjects may exercise the following rights-right of information, right of rectification, right of detection, right of processing limitation, right of objects may exercise the following rights-right of information, right of the data transferability, in addition, persons any time with effect for the future, as well as the right to file a compaint with the competent data protection supervisory authority. For future details on the processing of personal data by TÜV. Rheinland as the person responsible or contract processor; please refer to the respective data protection information. You can contact the Group Data Protection Officer of collowing address. TÜV. Rheinland Ad, Go' Group Data Protection Officer, Am Grauen Stein, 51105 Cologne, Germany.

### 15. Test material: transport risk and storage

- 15.1The risk and costs for freight and transport of documents or test material to and from TÛV Rheinland as well as the costs of necessary disposal measures shall be borne by the client
- 15 2.Any destroyed and otherwise worthers to transition will of singular disposal of the TDV Rheinland for the client at the expense of the client at the state of TDV Rheinland for four (4) weeks after completion of the test. If a longer storage period is desired, TDV Rheinland charges and the expense of the client at the expense of the disposal of the expense of the disposal of the expense of the disposal of the TDV Rheinland for the client for a fee in accordance with clause 15.2.

  15.4After the exprise of the 4 weeks or any longer period agreed upon, the test material will be disposed of by TDV Rheinland for the client for a fee in accordance with clause 15.2.

- 16.1 Notwithstanding clause 3.3 of the GTCB, TDV Rheinland and the client are entitled to terminate the contract in its entirety or, in the case of services combined in one contract, each of the combined parts of the contract individually and independently of the continuation of the remaining services with six (6) months' notice to the end of the contractually agreed term.

- terminate incontrols of the entirely of or the case of service controlled many of the control interest controlled many of the control interest of the control of the contro

### 17. Partial invalidity, written form, place of jurisdiction and dispute resolution

- 17.2

- invalidity, written form, place of jurisdiction and dispute resolution.

  All amendments and supplements must be in writing in order to be effective. This also applies to amendments and supplements to this clause 17.1.

  Should one or several of the provisions under the contract and/or these terms and conditions be or become inefficive, the contracting parties that prejace the invalid provision in legal and commercial terms.

  Unless otherwise subjusted in the contract, the powering law of the contract and these terms and conditions shall be chosen following the rules as below: It contracts the contract of the contract and these terms and conditions shall be chosen following the rules as below: It contracts the contract of the property of the contract and these terms and conditions shall be chosen following the rules as below: If TOV flow the contract is the contract of the report is the contract of the report is the rule of the ru
- in Beijing, Shatuguai, some claiming partly. in the case of TÜV Rheinland in question being legally registered and existing in Taiwan, to Chinese Arbitration Association Taipei Branch to be arbitrated in accordance with its then current Rules of Arbitration. The arbitration shall take place
- in Taipei, in taipei, in the case of TÜV Rheinland being legally registered and existing in Hong Kong, to Hong Kong International Arbitration Centre (HKLAC) to be settled by arbitration under the HKLAC Administered Arbitration Rules in force when the Notice of Arbitration is submitted in accordance with these rules. The arbitration shall take