

Test Report No.: 178139365a 001

Page 1 of 11

Sample Description As Declared :

No. Of Sample : 80 Pcs
Product Description : KN95 mask
Colour : White
Lot No./Batch code : 001
Test type : Partial test
Country of Origin : China
Sales Destination(country) : GERMANY
Product type : Single shift use only

Manufacturer Factory : SHENZHEN JIAXUSI TECHNOLOGY CO., LTD
Manufacturer Address : Fufang Science Park, Xintian Village, Fuyong Town, Baoan District, Shenzhen, China
Claimed Classification : FFP2 NR

Sample obtaining method: Sending by customer**Sample Receiving date:** 2020-04-10**Delivery condition:** Apparent good, Samples tested as received**Test Period:** 2020-04-15 to 2020-05-15**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.



2020-05-15

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.

Test Report No.: 178139365a 001

Page 2 of 11

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 Package[^] **NRq**
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.

7.5 Material[^] **PASS¹**
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 1: In accordance with the requirement.

Specimens -01,-02,-03 were conditioned in accordance with 8.3.1, None of the specimens conditioned suffered mechanical failure or collapse.

Specimens -04,-05,-06 were conditioned in accordance with 8.3.2, None of the specimens conditioned suffered collapse.

7.6 Cleaning and disinfecting[^] **NAp²**
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 2: Single shift use only.

7.7 Practical performance^
PASS³

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

Note 3: No imperfections.

Specimen and subject details:

Specimen	Subject
-07	SM
-08	LCF

7.8 Finish of parts^
PASS⁴

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

Note 4: None of the specimens used in limited laboratory testing undertaken showed the evidence of sharp edges or burrs.

7.9.1 Total inward leakage^
PASS⁵

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 5: 46 out of the 50 individual exercise results were not greater than 11%; 8 out 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(%)
SM	-09	A.R.	4.1	3.6	6.5	6.1	5.1	5.1
LZM	-10	A.R.	11.1	8.5	11.4	8.4	5.6	9.0
JLX	-11	A.R.	5.5	6.8	7.2	5.8	4.3	5.9
TS	-12	A.R.	3.3	7.8	9.6	6.6	5.0	6.5
ZMM	-13	A.R.	5.2	6.5	4.9	3.9	4.2	5.0
YZF	-14	T.C.	3.1	5.7	4.9	4.6	3.9	4.4
YB	-15	T.C.	5.0	11.7	14.3	7.5	7.5	9.2
GJB	-16	T.C.	3.5	3.1	5.6	5.3	4.4	4.4
ZH	-17	T.C.	3.8	9.0	11.0	5.7	5.7	7.0
TLX	-18	T.C.	4.6	7.8	6.0	4.8	3.6	5.3
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 l/min	Paraffin oil test 95 l/min
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

Aerosol	Condition	Sample No.	Penetration (%)		Assessment
			After 3 minutes	Max. during exposure	
Sodium chloride test	A.R.	-14	0.65		PASS
		-15	1.33		
		-16	0.84		
	S.W.	-46	1.16		
		-41	0.87		
		-42	0.69		
	M.S. + T.C.	-19	0.98	1.01	
		-20	0.88	0.88	
		-21	1.09	1.14	
Paraffin oil test	A.R.	-17	2.05		
		-18	1.71		
		-19	2.06		
	S.W.	-43	1.72		
		-44	1.46		
		-45	2.31		
	M.S. + T.C.	-22	1.80	2.27	
		-23	2.27	2.32	
		-24	2.37	3.12	
Maximum permitted		6			
Flow conditioning:		Single filter: 95.0 L/min			

7.10 Compatibility with skin^
PASS⁶

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 6: Specimens from -20 to -24(A.R.) and from -25 to -29(T.C.) were tested. No irritation or any other adverse effect to health.

7.11 Flammability^
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.	Result	Assessment
A.R.	-25	Burn for 0.6 s	PASS
	-26	Burn for 0.8 s	
T.C.	-30	Burn for 0.4 s	
	-31	Burn for 0.6 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 No.	Result	Assessment
A.R.	-27	0.38%	PASS
	-28	0.32%	
	-29	0.34%	
Maximum permitted		1.0%	

7.13 Head harness^
PASS⁷

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 7: Specimens from -30 to -34 (A.R.) and from -71 to -75(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 satisfied the total inward leakage requirement. See 7.9.1 for results.

7.14 Field of vision^
PASS⁸

The field of vision is acceptable if determined so in practical performance tests.

Note 8: Specimens from -35 and -36(A.R.) were tested. Pass the practical performance tests and no adverse comments.

7.15 Exhalation valve^
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^
PASS⁹

Classification	Maximum permitted resistance (mbar)		
	inhalation		exhalation
	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 9: FFP2 Filtering face mask. Test result are shown in below Table.

Table 7.16 Breathing resistance (mbar)

Test specification: EN149-2001 Clause 8.9

Specimen	Condition	Inhalation resistance(mbar)		Exhalation resistance(mbar)				
		At 30 l/min	At 95 l/min	Breathing machine(25 cycles/min x 2.0 l/stroke)				
				A	B	C	D	E
-37	A.R.	0.30	1.09	2.07	2.01	2.04	2.01	2.09
-38		0.30	1.09	2.14	2.09	2.11	2.06	2.12
-39		0.31	1.11	2.08	2.12	2.04	2.04	2.11
-67	T.C.	0.26	0.93	1.97	1.95	1.93	1.93	1.99
-68		0.30	1.08	1.91	2.00	1.96	1.95	1.99
-69		0.28	0.99	1.96	1.94	1.99	1.91	1.94
-46	S.W.	0.29	1.05	1.98	2.06	2.05	1.97	2.01
-47		0.28	0.99	2.06	1.99	2.01	1.97	2.04
-48		0.31	1.09	2.09	2.08	2.02	2.02	2.09
	A.R. + F.C.							
	T.C. + F.C.							
Maximum permitted		0.7	2.4	3.0				

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

7.17 Clogging^

NRq¹⁰

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

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

Note 10: Single shift use only.

7.18 Demountable parts^

NAp¹¹

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

Note 11: No demountable parts were used.

9 Marking^**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^

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

- 10.1 Information supplied by the manufacturer shall accompany every smallest 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.
- 10.5 Warning shall be given against problems likely to be encountered, for example:
- 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 Safety Science and Technology which complies with the requirement of ISO/IEC 17025:2017, the registration No. CNAS L0118.

Test Report No.: 178139365a 001

Page 11 of 11

Photo:



- END -

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

1.	Scope		
1.1	These General Terms and Conditions of Business of TÜV Rheinland in Greater China ("GTBCB") are made between the client and one or more member entities of TÜV Rheinland in Greater China as applicable as the case may be ("TÜV Rheinland"). The Greater China heretofore refers to Mainland China, Hong Kong and Taiwan. The client heretofore includes:	8.6	the client's assets or cases in which the commencement of insolvency proceedings has been dismissed due to lack of assets.
(i)	a natural person capable to form legally binding contracts under the applicable laws who concludes the contract not for the purpose of a daily use;	8.7	Objections to the invoices of TÜV Rheinland shall be submitted in writing within two weeks of receipt of the invoice.
(ii)	the incorporated or unincorporated entity duly organized, validly existing and capable to form legally binding contracts under the applicable law.	8.8	TÜV Rheinland shall be entitled to demand appropriate advance payments.
1.2	The following terms and conditions apply to agreed services including consultancy services, information, deliveries and similar services as well as ancillary services and other secondary obligations provided within the scope of contract performance.	8.9	TÜV Rheinland shall be entitled to raise its fees at the beginning of a month if overheads and/or purchase costs have increased. In this case, TÜV Rheinland shall notify the client in writing of the rise in fees. This notification shall be issued one month prior to the date on which the rise in fees shall come into effect (period of notice of changes in fees). If the rise in fees remains under 5% per contractual year, the client shall not have the right to terminate the contract. If the rise in fees exceeds 5% per contractual year, the client shall be entitled to terminate the contract by the end of the period of notice of changes in fees. If the contract is not terminated, the changed fees shall be deemed to have been agreed upon by the time of the expiry of the notice period.
1.3	Any standard terms and conditions of the client of any nature shall not apply and shall hereby be expressly excluded. No standard contractual terms and conditions of the client shall form part of the contract even if TÜV Rheinland does not explicitly object to them.	8.9	Only legally established and undisputed claims may be offset against claims by TÜV Rheinland.
1.4	In the context of an ongoing business relationship with the client, this GTBCB shall also apply to future contracts with the client without TÜV Rheinland having to refer to them separately in each individual case.	9.	Acceptance of work
2.	Quotations	9.1	Any part of the work result ordered which is complete in itself may be presented by TÜV Rheinland for acceptance as an instalment. The client shall be obliged to accept it immediately.
	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.	9.2	If acceptance is required or contractually agreed in 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 period stating at least one fundamental breach of contract by TÜV Rheinland.
3.	Coming into effect and duration of contracts	9.3	client is not entitled to refuse acceptance due to insignificant breach of contract by TÜV Rheinland.
3.1	The contract shall come into effect for the agreed terms upon the quotation letter of TÜV Rheinland or a separate contractual document being signed by both contracting parties, or upon the work requested by the client being carried out by TÜV Rheinland. If the client instructs TÜV Rheinland without receiving a quotation from TÜV Rheinland (quotation), TÜV Rheinland is, in its sole discretion, entitled to accept the order by giving written notice of such acceptance (including notice sent via electronic means) or by performing the requested services.	9.4	If acceptance is excluded according to the nature of the work performance of TÜV Rheinland, the completion of the work shall take its place.
3.2	The contract term starts upon the coming into effect of the contract in accordance with article 3.1 and shall continue for the term agreed in the contract.	9.5	If the client was unable to make use of the time windows provided for within the scope of a certification procedure for the performance of work by TÜV Rheinland, including the certificate is therefore to be withdrawn (e.g. performance of surveillance audits), TÜV Rheinland is entitled to immediately charge a lump-sum compensation of 10% of the order amount as compensation for the expenses. The client reserves the right to prove that the TÜV Rheinland has incurred no damage whatsoever or only a considerably lower damage than the above lump sum.
3.3	If the contract provides for an extension of the contract term, the contract term will be extended by the term provided for in the contract unless terminated in writing by either party with a six-week notice prior to the end of the contractual term.	9.6	As the client has undertaken in the order to accept services, TÜV Rheinland shall also be entitled to charge lump-sum damages in the amount of 10% of the order amount as compensation for expenses if the service is not called within one year after the order has been placed. The client reserves the right to prove that the TÜV Rheinland has incurred no damage whatsoever or only a considerably lower damage than the above mentioned lump sum.
4.	Scope of services	10.	Confidentiality
4.1	The scope and type of the services to be provided by TÜV Rheinland shall be specified in the contractually agreed service scope of TÜV Rheinland by both parties. If no such separate service scope of TÜV Rheinland exists, then the written confirmation of order by TÜV Rheinland shall be decisive for the service to be provided.	10.1	For the purpose of these terms and conditions, "confidential information" means all information, documents, images, drawings, know-how, data, samples and project documentation which one party (the "disclosing party") hands over, transfers or otherwise discloses to the other party (the "receiving party"), and the confidential information created during performance of work by TÜV Rheinland, including product testing data, defects, conformity to the technical standard and related reports. Confidential information also includes paper copies and electronic copies of such information. Confidential information is not confidential if the data and information have been collected, compiled or otherwise obtained by TÜV Rheinland (non-personal) within the scope of the provision of services by TÜV Rheinland. TÜV Rheinland is entitled to store, use, further develop and pass on the data obtained in connection with the provision of services for the purposes of developing new services, improving services and analysing the provision of services.
4.2	The agreed services shall be performed in compliance with the regulations in force at the time the contract is entered into.	10.2	The disclosing party shall mark all confidential information disclosed in written form as confidential before passing it onto the receiving party. The same applies to confidential information transmitted by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information within five working days of oral disclosure. Where the disclosing party fails to do so within the stipulated period, the receiving party shall not take any confidentiality obligations hereunder towards such information.
4.3	TÜV Rheinland is entitled to determine, in its sole discretion, the method and nature of the assessment unless otherwise expressly agreed in writing or if mandatory provisions require a specific procedure to be followed.	10.3	All confidential information which the disclosing party transmits or otherwise discloses to the receiving party and which is created during performance of work by TÜV Rheinland:
4.4	An execution of the work there shall be no simultaneous assumption of any guarantee of the correctness (proper quality) and working order of either tested or examined parts nor of the installation as a whole and its subsystem and/or downstream processes, organisations, use and application in accordance with regulations, use of the systems and the installations in which the services of TÜV Rheinland shall assume no responsibility for the construction, selection of materials and assembly of installations examined, nor for their use and application in accordance with regulations, unless these questions are expressly covered by the contract.	a)	may only be used by the receiving party for the purpose of performing the contract, unless expressly otherwise agreed in writing by the disclosing party.
4.5	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.	b)	may not be copied, distributed, published or otherwise disclosed by the receiving party, unless this is necessary for fulfilling the purpose of the contract or TÜV Rheinland is required to do so for confidential information inspection report or documentation to the government authorities, judicial court, accreditation bodies or other parties that are involved in the performance of the contract.
4.6	Mandatory legal regulations and standards or official requirements for the agreed service scope change after conclusion of the contract, with a written notice to the client, TÜV Rheinland shall be entitled to additional remuneration for resulting additional expenses.	c)	must be treated as confidential information with the same level of confidentiality as the receiving party may disclose any confidential information to third parties from the disclosing party only to those of its employees who need this information to perform the services required for the contract. The receiving party undertakes to oblige these employees to the same level of secrecy as set forth in this confidentiality clause.
4.7	The services to be provided by TÜV Rheinland under the contract are agreed exclusively with the client. A contract of third parties with the services of TÜV Rheinland, as well as making available of and justifying confidence in the work results (test reports, test results, expert reports, etc.) is not part of the agreements. This also applies if the client passes on work results - in full or in extracts - to third parties in accordance with clause 11.4.	10.4	The receiving party may disclose any confidential information to third parties from the disclosing party only to those of its employees who need this information to perform the services required for the contract. The receiving party undertakes to oblige these employees to the same level of secrecy as set forth in this confidentiality clause.
5.	Performance periods/dates	10.5	Information for which the receiving party can furnish proof that:
5.1	The contractually agreed periods/dates of performance are based on estimates of the 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 writing.	a)	was generally known at the time of disclosure or has become general knowledge without violation of this confidentiality clause by the receiving party; or
5.2	If binding periods of performance have been agreed, these periods shall not commence until the client has submitted all required documents to TÜV Rheinland.	b)	was disclosed to the receiving party by a third party entitled to disclose this information; or
5.3	Articles 5.1 and 5.2 also apply, even without express approval by the client, to all extensions of agreed periods/dates of performance not caused by TÜV Rheinland. TÜV Rheinland is not responsible for a delay in performance, in particular if the client has not fulfilled his duties to cooperate in accordance with clause 6.1 or has not done so in time and, in particular, has not provided TÜV Rheinland with all documents and information required for the performance of the service as specified in the contract.	c)	the receiving party has already possessed this information prior to disclosure by the disclosing party; or
5.4	TÜV Rheinland is not responsible for a delay in performance, in particular if the client has not fulfilled his duties to cooperate in accordance with clause 6.1 or has not done so in time and, in particular, has not provided TÜV Rheinland with all documents and information required for the performance of the service as specified in the contract.	d)	the receiving party has developed it itself, irrespective of disclosure by the disclosing party, shall not be deemed to constitute "confidential information" as defined in this confidentiality clause.
5.5	If the performance of TÜV Rheinland is delayed due to unforeseeable circumstances such as force majeure, strikes, business disruptions, governmental regulations, transport obstacles, etc., TÜV Rheinland is entitled to postpone performance for a reasonable period of time which corresponds at least to the duration of the hindrance plus any time period which may be required to resume performance.	10.6	All confidential information shall remain the property of the disclosing party. The receiving party hereby agrees to immediately (i) return all confidential information, including all copies, to the disclosing party, and/or (ii) on request by the disclosing party, to destroy all confidential information, including all copies, and confirm the destruction of this confidential information to the disclosing party in writing, at any time if requested by the disclosing party but at the latest and without special request after termination or expiry of the contract. This does not extend to trade reports and certificates prepared for the client solely for the purpose of fulfilling the obligations under the contract, which shall remain with the client. However, TÜV Rheinland is entitled to make the copies of such reports, certificates and confidential information that forms the basis for preparing these reports and certificates in order to evidence the correctness of its results and for general documentation purposes required by laws, regulations and the requirements of working procedures of TÜV Rheinland.
6.	The client's obligation to cooperate	10.7	From the start of the contract and for a period of three years after termination or expiry of the contract, the receiving party shall maintain strict secrecy of all confidential information and shall not disclose this information to any third parties or use it for itself.
6.1	The client shall guarantee that all cooperation required on its part, its agents or third parties will be provided in good time and at no cost to TÜV Rheinland.	11.	Copyrights and rights of use, publications
6.2	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:	11.1	TÜV Rheinland shall retain all exclusive copyrights in the reports, expert reports/opinions, test reports/results, results, calculations, presentations etc. prepared by TÜV Rheinland, unless otherwise agreed by the parties in a separate agreement. As the owner of the copyrights, TÜV Rheinland is free to grant others the right to use the work results for individual or all types of use ("right of use"). The client receives a simple, unlimited, non-transferable, non-sublicensable right of use to the contents of the work results produced within the scope of the contract, unless otherwise agreed by the parties in a separate agreement. The client may only use such reports, expert reports/opinions, test reports/results, results calculations, presentations etc. prepared within the scope of the contract for the contractually agreed purpose.
a)	it has required statutory qualifications;	11.2	The client's use of the work results for advertising purposes or for any other purpose shall be subject to full payment of the remuneration agreed in favour of TÜV Rheinland.
b)	the product, service or management system to be certified complies with applicable laws and regulations; and	11.3	Any publication or duplication of the work results for advertising purposes or for any other purpose of the work results beyond the scope regulated in clause 11.2 needs the prior written approval of TÜV Rheinland in each individual case.
c)	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.	11.4	TÜV Rheinland may use work results for individual or all types of use ("right of use") 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 publications.
If the client breaches the aforesaid representations and warranties, TÜV Rheinland is entitled to (i) immediately terminate the contractor/order without prior notice; and (ii) withdraw the issued testing report/certificates if any.		11.5	The content 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 mark of TÜV Rheinland.
6.3	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, TÜV Rheinland shall be entitled to charge extra fees for such additional expense.	12.	Liability of TÜV Rheinland
7.	Prices	12.1	Irrespective of the legal basis, to the fullest extent permitted by applicable law, in the event of a breach of contractual obligations or tort, the liability of TÜV Rheinland for all damages, losses and reimbursement of expenses caused by TÜV Rheinland, its legal representatives and/or employees shall be limited to: (i) in the case of a contract with a fixed overall fee, three times the overall fee for the entire contract; (ii) in the case of a contract for annually recurring services, the agreed annual fee; (iii) in the case of a contract expressly charged on a time and material basis, a maximum of 20,000 Euro or equivalent amount in local currency; and (iv) in the case of a framework agreement that provides for the possibility of placing individual orders, three times of the fee for the individual order under which the damages or losses have occurred. Notwithstanding the above, in the event that the total and accumulated liability calculated according to the foregoing provisions exceeds 2.5 Million Euro or
7.1	If the scope of performance is not laid down in writing when the order is placed, invoicing shall be based on costs actually incurred. If no price is agreed in writing, invoicing shall be made in accordance with the price list of TÜV Rheinland valid at the time of performance.	12.2	equivalent amount in local currency, the total and accumulated liability of TÜV Rheinland shall be only limited to the maximum amount of the said 2.5 Million Euro or equivalent amount in local currency.
7.2	Unless otherwise agreed, work shall be invoiced according to the progress of the work.	12.3	The limitation of liability according to article 12.1 above shall not apply to damages and/or losses caused by malice, intent or gross negligence on the part of TÜV Rheinland or its vicarious agents. Such limitation shall not apply to damages for a person's death, physical injury or illness.
7.3	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.	12.4	In cases involving a fundamental breach of contract, TÜV Rheinland will be liable even where minor negligence is involved. For this purpose, a "fundamental breach" is a breach of a material contractual obligation, the performance of which permits the due performance of the contract. Any claim for damages for a fundamental breach of contract shall be limited to the amount of damages reasonably foreseeable as a possible consequence of such breach of contract at the time of the breach (reasonably foreseeable damages), unless the circumstances described in article 12.2 applies.
8.	Payment terms	12.5	TÜV Rheinland shall not be liable for the acts of the personnel made available by the client to support TÜV Rheinland in the performance of its services under the contract, unless such personnel made available is regarded as vicarious agent of TÜV Rheinland. If TÜV Rheinland is not liable for the acts of the personnel made available by the client under the foregoing provision, the client shall indemnify TÜV Rheinland against any claims made by third parties arising from or in connection with such personnel's acts.
8.1	All invoice amounts shall be due for payment without deduction on receipt of the invoice. No discounts and rebates shall be granted.	12.6	None of the provisions of this article 12 changes the burden of proof to the disadvantage of the client.
8.2	Payments shall be made to the bank account of TÜV Rheinland as indicated on the invoice, stating the invoice and client numbers.	13.	Export control
8.3	In cases of default of payment, TÜV Rheinland shall be entitled to claim default interest at the applicable short term loan interest rate publicly announced by a reputable commercial bank in the country where TÜV Rheinland is located. At the same time, TÜV Rheinland reserves the right to claim further damages.	13.1	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 national and international export control law.
8.4	Should the client default in payment of the invoice despite being granted a reasonable grace period, TÜV Rheinland shall be entitled to cancel the contract, withdraw the certificate, claim damages for non-performance and refuse to continue performance of the contract.	13.2	The performance of a contract with the client is subject to the proviso that there are no obstacles to performance due to national or international foreign trade legislations or embargoes 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 incurred therefrom by TÜV Rheinland.
8.5	The provisions set forth in article 8.4 shall also apply in cases involving returned cheques, cessation of payment, commencement of insolvency proceedings against	14.	Data protection notice
			TÜV Rheinland processes personal data of the client for the purpose of fulfilling this contract. In addition, TÜV Rheinland also processes the data for other purposes in accordance with the relevant legal basis. The personal data of the client will only be disclosed to other natural or legal persons if the legal requirements are met. This also applies to transfers to third countries. The personal data will be deleted immediately as soon as a corresponding reason for deletion arises. Data subjects may exercise the following rights: right of information, right of rectification, right of deletion, right of processing limitation, right of objection, right of data transferability. For further 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 TÜV Rheinland for further details on TÜV Rheinland by e-mail at datsenschutz@de.tuv.com or by post at the following address: TÜV Rheinland AG, c/o Group Data Protection Officer, An Grauen Stein, 51105 Cologne, Germany.
		15.	Test material: transport risk and storage
		15.1	The risk and costs for freight and transport of documents or test material to and from TÜV Rheinland as well as the costs of necessary disposal measures shall be borne by the client.
		15.2	Any destroyed and otherwise worthless test material will be disposed of by TÜV Rheinland for the client at the expense of the client, unless otherwise agreed.
		15.3	Test material shall be stored by TÜV Rheinland for four (4) weeks after completion of the test. If a longer storage period is desired, TÜV Rheinland charges an appropriate storage fee.
		15.4	After the expiry of the 4 weeks or any longer period agreed upon, the test material will be disposed of by TÜV Rheinland for the client for a fee in accordance with clause 15.2.
		16.	Termination of the contract
		16.1	Notwithstanding clause 3.3 of the GTBCB, TÜV Rheinland and the client are entitled to terminate the contract in its entirety or, in the case of services confirmed 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.
		16.2	For good cause, TÜV Rheinland may consider giving a written notice to the client to terminate the contract which includes but not limited to the following:
		a)	the client does not immediately notify TÜV Rheinland of changes in the conditions within the company which are relevant for certification or signs of such changes;
		b)	the client misses the certificate or certification mark or uses it in violation of the contract;
		c)	the event of several consecutive defaults in payment (at least three times);
		d)	a substantial deterioration of the financial circumstances of the client occurs and as a result the payment claims of TÜV Rheinland under the contract are considerably endangered and TÜV Rheinland cannot reasonably be expected to continue the contractual relationship.
		16.3	In the event of termination with written notice by TÜV Rheinland for good cause, TÜV Rheinland shall be entitled to a lump-sum claim for damages against the client if the conditions of a claim for damages under the contract are fulfilled. In this case, the remuneration to be paid until the end of the fixed contract term as lump-sum compensation. The client reserves the right to prove that there is no damage or a considerably lower damage. TÜV Rheinland reserves the right to prove that there is a considerably higher damage in individual cases.
		16.4	TÜV Rheinland is also entitled to terminate the contract with written notice if the client has not been able to make use of the time windows for auditing/service provision provided by TÜV Rheinland within the scope of a certification procedure and the certificate therefore has to be withdrawn (for example during the performance of monitoring audits). Clause 16.3 applies accordingly.
		17.	Partial invalidity, written form, place of jurisdiction and dispute resolution
		17.1	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.
		17.2	Should one or several of the provisions under the contract and/or these terms and conditions be or become ineffective, the contracting parties shall replace the invalid provision with a legally valid provision that comes closest to the content of the invalid provision in legal and commercial terms.
		17.3	Unless otherwise stipulated in the contract, the governing law of the contract and these terms and conditions shall be chosen following the rules as below:
		a)	if TÜV Rheinland in question is legally registered and existing in the People's Republic of China, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of the People's Republic of China;
		b)	if TÜV Rheinland in question is legally registered and existing in Taiwan, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Taiwan;
		c)	if TÜV Rheinland in question is legally registered and existing in Hong Kong, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Hong Kong.
		17.4	Any dispute in connection with the contract and these terms and conditions or the execution thereof shall be settled friendly through negotiations.
			Unless otherwise stipulated in the contract, if no settlement or no agreement in respect of the extension of the negotiation period can be reached within two months of the arising of the dispute, the dispute shall be submitted:
		a)	in the case of TÜV Rheinland in question being legally registered and existing in the People's Republic of China, to the China International Economic and Trade Arbitration Commission (CIETAC) to be settled by arbitration under the Arbitration Rules of CIETAC in force when the arbitration is submitted. The arbitration shall take place in Beijing, Shanghai, Shenzhen or Chongqing as appropriately chosen by the claiming party;
		b)	in the case of TÜV Rheinland in question being legally registered and existing in Taiwan, to Chinese Arbitration Association (CAA) to be settled by arbitration in accordance with its then current Rules of Arbitration. The arbitration shall take place in Taipei;
		c)	in the case of TÜV Rheinland being legally registered and existing in Hong Kong, to Hong Kong International Arbitration Centre (HKIAC) to be settled by arbitration under the HKIAC Administered Arbitration Rules in force when the Notice of Arbitration is submitted in accordance with these rules. The arbitration shall take place in Hong Kong.
			The decision of the relevant arbitration tribunal shall be final and binding on both parties. The arbitration fee shall be borne by the losing party.
			May 2019