

DOCUMENTATION

REF. CV-45 / MC-002

MASK ULTRA PLUS+ PROTECTION FFP3

MASCARILLA ULTRA PLUS+ PROTECCIÓN FFP3

MASQUE ULTRA PLUS+ PROTECTION FFP3

MASCHERINA PROTEZIONE ULTRA PLUS+ FFP3



MASTER BOX: 1200 pcs



ITEM: MC-002

DESCRIPTION: NAAMIO

MATERIAL:

5 PLY (43% non woven, 29% Meltblown, 28% algodón).

QUANTITY: 1.200

G.W

N.W

CNT SIZE

BATCH NUMBER:

PRODUCTION DATE:

VALIDITY:

MADE IN P.R.C.



BAG: 1 pc



NOTA IMPORTANTE:

In tutti i processi di fabbricazione delle nostre mascherine, non vengono utilizzati grafene o suoi derivati.

Colaboramos con



Reconocimiento
a la responsabilidad
ambiental



Universidad
Politécnica
de Cartagena

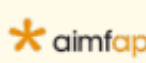


UCAM
UNIVERSIDAD
CATÓLICA DE MURCIA

UIMP Cartagena
Universidad Internacional Menéndez Pelayo



Asociaciones y Entidades a las que pertenecemos





We

Company Name:	QUANZHOU CITY MEICHEN PROTECTIVE PRODUCTS CO.,LTD
Postal address:	NO.148,DINGXINCUO,XIN LAN VILLAGE,MEISHAN TOWN,NAN'AN QUANZHOU CITY,FUJIAN PROVINCE,CHINA
Postcode:	362321
City:	Quanzhou

Declare that the Doc is issued under our sole responsibility and belongs to the following products:

Apparatus model/Product:	Disposable protective mask FFP3
Type:	MC-002

Object of the declaration(identification of apparatus allowing traceability. It may include a colour image of sufficient clarity where necessary for the identification of the appearance)



The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

Personal protective equipment Regulation(EU)2016/425

The following harmonised standards and technical specifications have been applied:

Title,Date of standards/specification:

EN149:2001+A1:2009

Notifiedbody(whereapplicable)	4 digit notified bodynumber
UNIVERSAL CERTIFICATION AND SURVEILLANCE TRADE LTD,CO	2163
Certificate Number:	CE 2163-PPE-1874
Technical report numbered:	29.12.2020/2163-KKD-1874

Signed for

Quanzhou,China

30/12/2020

Place of issue

Date of issue

ALICE NING

Name,function,signature
General Manager

EU TYPE EXAMINATION CERTIFICATE

Certificate No: 2163-PPE-1874

Respiratory protective devices, filtering half masks to protect against particles manufactured by

Quanzhou City Meichen Protective Products Co., Ltd.No.148, Dingxincuo, Xin Lan Village, Meishan Town, Nan'an Quanzhou City,
Fujian Province, CHINA

are tested and evaluated according to

**EN 149:2001 + A1:2009 Respiratory Protective Devices -
Filtering Half Masks to Protect Against Particles -
Requirements, Testing, Marking**

Based on the type examination conducted with the evaluation of test reports, technical file according to Personal Protective Equipment Regulation (EU) 2016/425 Annex 5, it is approved that the product meets the requirements of the regulation.

Product Definition

Single shift use particle filtering half mask for protection against solid and liquid aerosols, is a folding type, 5 layers, without valve, nose clip and sponge strip, fitted with ear loops.

Model: MC-002**Classification:** FFP3 NR

Model have White, Grey, Black, Blue and Light Pink versions

For more details, refer technical evaluation report provided to the manufacturer, dated 29.12.2020 and number 2163-KKD-1874

Here by the manufacturer is allowed to use notified body number (2163) and can fix CE mark, as shown below, on the Category III product models given above, with;

- Issuing an appropriate EU Declaration of Conformity according to **Personal Protective Equipment Regulation (EU) 2016/425 Annex 9.**
- Ongoing successful performance in fulfilment of the requirements set out in **Personal Protective Equipment Regulation (EU) 2016/425** and harmonised standards, ensured by assessments based on **Annex 7 (Module C2) or Annex 8 (Module D)** of the regulation no later than 1 year from the beginning of serial production

This certificate is initially issued on **30/12/2020** and will be valid for 5 years, if there is no change in the relevant harmonised standard affecting the essential health and safety requirements.Suat KAÇMAZ
UNIVERSAL CERTIFICATION
Director

CONFORMITY TO TYPE CERTIFICATE

Certificate No: 2163-PPE-1874/01

Respiratory protective devices, filtering half masks to protect against particles manufactured for

Quanzhou City Meichen Protective Products Co., Ltd.No.148, Dingxincuo, Xin Lan Village, Meishan Town, Nan'An Quanzhou City,
Fujian Province, CHINA

Continues to fulfil the requirements of

**EN 149:2001 + A1:2009 Respiratory Protective Devices -
Filtering Half Masks to Protect Against Particles -
Requirements, Testing, Marking**

Based on the evaluation of test reports and internal quality control audit reports according to EN 149+A1:2009 and Personal Protective Equipment Regulation (EU) 2016/425 Annex VII (Module C2). This certificate implies that the manufactured products show below are in conformance with the approved EU Type Examination model and meets the requirements of the regulation.

Product Definition

Model	Class	EU Type Examination Certificate		
		Serial No	Date	Issuing NB No
MC-002	FFP3 NR	2163-PPE-1874	30.12.2020	2163

Here by the manufacturer is allowed to use notified body number (2163) and can fix CE mark, as shown below, on the Category III product models given above, with;

- Issuing an appropriate EU Declaration of Conformity according to **Personal Protective Equipment Regulation (EU) 2016/425 Annex 9**.
- Taking all measures necessary so that the manufacturing process and its monitoring ensure the homogeneity of production and conformity of the manufactured PPE with the type described in the EU type examination certificate.

This certificate is issued on **16/04/2021** and will be valid for one year, until **15/04/2022** if the manufacturer makes no major change in the product designs and manufacturing processes affecting the product performance on the essential health and safety requirement.



Suat KACMAZ
UNIVERSAL CERTIFICATION
Director



TECHNICAL ASSESSMENT REPORT

REPORT DATE / NO: 29.12.2020 / 2163-KKD-1874

Manufacturer: Quanzhou City Meichen Protective Products Co., Ltd.

Address: No.148, Dingxincuo, Xin Lan Village, Meishan Town, Nan'an Quanzhou City, Fujian Province, CHINA

Introduction

This report is prepared for the, given above, manufacturer according to the test results obtained from Zhejiang Academy of Science and Technology for Inspection and Quarantine accredited by CNAS (Chinese Accreditation Service), signatory to ILAC MRA, with number L0354 for the product identified below, dated 02.12.2020 with Serial No JKF20032861 based on EN 149: 2001 + A1: 2009 standard and the technical file dated 20.12.2020 Version 0 provided by the manufacturer.

The technical file of the manufacturer, and risk evaluation against the essential health safety requirements and the test report evaluated for their relation with Essential Requirements of Personal Protective Equipment Regulation and found to be appropriate.

This report is an annex and an integral part of the EU Type Examination Certificate issued to the manufacturer. The test results and issued certificate belongs only to the tested model. The technical report consists of a total of 6 pages.

Product Description: Single shift use particle filtering half mask for protection against solid and liquid aerosols, is a folding type, 5 layers, without valve, nose clip and sponge strip, fitted with ear loops.

Component and Materials:

Component	Material	Grade / Size
1st Layer (Outer)	Non-woven Fabric	50 gsm (± 2.0 gsm)
2nd Layer	Melt-blown Fabric	30 gsm (± 2.0 gsm)
3rd Layer	Melt-blown Fabric	40 gsm (± 2.0 gsm)
4th Layer	Hot Air Cotton Fabric	30 gsm (± 2.0 gsm)
5th Layer (Inner)	Non-woven Fabric	26 gsm (± 2.0 gsm)
Ear Strap	Spandex Elastic Band	Length: 200 mm (± 2 mm) Width: 5 mm (± 0.5 mm)
Nose Bridge	Polypropylene / Galvanized iron wire	Length: 85 mm (± 1 mm) Width: 5 mm (± 0.5 mm)
Sponge Strip	Polyester	Length: 100 mm (± 1 mm) Width: 10 mm (± 1 mm) Thickness: 10 mm (± 1 mm)

Classification: FFP3 NR

Model: MC-002

Colored samples of the mask



ESSENTIAL HEALTH and SAFETY REQUIREMENTS GIVEN IN EUROPEAN UNION REGULATION EU 2016/425 CORRESPONDING RISKS FOR THE PRODUCT

1.1. Design principles

1.1.1. Ergonomics

PPE must be so designed and manufactured that in the foreseeable conditions of use for which it is intended the user can perform the risk related activity normally whilst enjoying appropriate protection of the highest possible level.

1.1.2. Levels and classes of protection

1.1.2.1. Highest level of protection possible

The optimum level of protection to be taken into account in the design is that beyond which the constraints by the wearing of the PPE would prevent its effective use during the period of exposure to the risk or normal performance of the activity.

1.1.2.2. Classes of protection appropriate to different levels of risk

Where differing foreseeable conditions of use are such that several levels of the same risk can be distinguished, appropriate classes of protection must be taken into account in the design of the PPE.

1.2. Innocuousness of PPE

1.2.1. Absence of risks and other inherent nuisance factors

PPE must be so designed and manufactured as to preclude risks and other nuisance factors under foreseeable conditions of use.

1.2.1.1. Suitable constituent materials

The materials of which the PPE is made, including any of their possible decomposition products, must not adversely affect the health or safety of users.

1.2.1.2. Satisfactory surface condition of all PPE parts in contact with the user

Any part of the PPE that is in contact or is liable to come into contact with the user when the PPE is worn must be free of rough surfaces, sharp edges, sharp points and the like which could cause excessive irritation or injuries

1.2.1.3. Maximum permissible user impediment

Any impediment caused by PPE to movements to be made, postures to be adopted and sensory perception must be minimized; nor must PPE cause movements which endanger the user or other persons.

1.3 Comfort and effectiveness

1.3.1. Adaptation of PPE to user morphology

PPE must be designed and manufactured in such a way as to facilitate its correct positioning on the user and to remain in place for the foreseeable period of use, bearing in mind ambient factors, the actions to be carried out and the postures to be adopted. For this purpose, it must be possible to adapt the PPE to fit the morphology of the user by all appropriate means, such as adequate adjustment and attachment systems or the provision of an adequate range of sizes.

1.3.2. Lightness and design strength

PPE must be as light as possible without prejudicing design strength and efficiency.

Apart from the specific additional requirements which they must satisfy in order to provide adequate protection against the risks in question (see 3), PPE must be capable of withstanding the effects of ambient phenomena inherent under the foreseeable conditions of use

1.4. Information supplied by the manufacturer

The notes that must be drawn up by the former and supplied when PPE is placed on the market must contain all relevant information on:

- In addition to the name and address of the manufacturer and/or his authorized representative established in the Community
- Storage, use, cleaning, maintenance, servicing and disinfection. cleaning, maintenance or disinfectant protection recommended by manufacturers must have no adverse effect on PPE or users when applied in accordance with the relevant instructions;
- Performance as recorded during technical tests to check the levels or classes of protection provided by the PPE in question;
- Suitable PPE accessories and the characteristics of appropriate spare parts;
- The classes of protection appropriate to different levels of risk and the corresponding limits of use;
- The obsolescence deadline or period of obsolescence of PPE or certain of its components;
- The type of packaging suitable for transport;
- The significance of any markings (see 2.12)
- Where appropriate the references of the Directives applied in accordance with Article 5(6) (b);
- The name, address and identification number of the notified body involved in the design stage of the PPE

These notes, which must be precise and comprehensible, must be provided at least in the official language(s) of the member state of destination



2. ADDITIONAL REQUIREMENTS COMMON TO SEVERAL CLASSES OR TYPES OF PPE

2.1. PPE incorporating adjustment systems

If PPE incorporates adjustment systems, the latter must be designed and manufactured so that, after adjustment, they do not become undone unintentionally in the foreseeable conditions of use.

2.3. PPE for the face, eyes and respiratory system

Any restriction of the user's face, eyes, field of vision or respiratory system by the PPE shall be minimised.

The screens for those types of PPE must have a degree of optical neutrality that is compatible with the degree of precision and the duration of the activities of the user.

If necessary, such PPE must be treated or provided with means to prevent misting-up.

Models of PPE intended for users requiring sight correction must be compatible with the wearing of spectacles or contact lenses.

2.4. PPE subject to ageing

If it is known that the design performance of new PPE may be significantly affected by ageing, the month and year of manufacture and/or, if possible, the month and year of obsolescence must be indelibly and unambiguously marked on each item of PPE placed on the market and on its packaging.

If the manufacturer is unable to give an undertaking with regard to the useful life of the PPE, his instructions must provide all the information necessary to enable the purchaser or user to establish a reasonable obsolescence month and year, taking into account the quality level of the model and the effective conditions of storage, use, cleaning, servicing and maintenance.

Where appreciable and rapid deterioration in PPE performance is likely to be caused by ageing resulting from the periodic use of a cleaning process recommended by the manufacturer, the latter must, if possible, affix a marking to each item of PPE placed on the market indicating the maximum number of cleaning operations that may be carried out before the equipment needs to be inspected or discarded. Where such a marking is not affixed, the manufacturer must give that information in his instructions.

2.6. PPE for use in potentially explosive atmospheres

PPE intended for use in potentially explosive atmospheres must be designed and manufactured in such a way that it cannot be the source of an electric, electrostatic or impact-induced arc or spark likely to cause an explosive mixture to ignite.

2.8. PPE for intervention in very dangerous situations

The instructions supplied by the manufacturer with PPE for intervention in very dangerous situations must include, in particular, data intended for competent, trained persons who are qualified to interpret them and ensure their application by the user.

The instructions must also describe the procedure to be adopted in order to verify that PPE is correctly adjusted and functional when worn by the user.

Where PPE incorporates an alarm which is activated in the absence of the level of protection normally provided, the alarm must be designed and placed so that it can be perceived by the user in the foreseeable conditions of use.

2.9. PPE incorporating components which can be adjusted or removed by the user

Where PPE incorporates components which can be attached, adjusted or removed by the user for replacement purposes, such components must be designed and manufactured so that they can be easily attached, adjusted and removed without tools.

2.12. PPE bearing one or more identification or recognition marks directly or indirectly relating to health and safety

The identification or recognition marks directly or indirectly relating to health and safety affixed to these types or classes of must preferably take the form of harmonized pictograms or ideograms and must remain perfectly legible throughout the foreseeable useful life of the PPE. In addition, these marks must be complete, precise and comprehensible so as to prevent any misinterpretation; in particular, where such marks incorporate words or sentences, the latter must appear in the official language(s) of the Member State where the equipment is to be used.

If PPE (or a PPE component) is too small to allow all or part of the necessary marking to be affixed, the relevant information must be mentioned on the packing and in the manufacturer's notes.

3. ADDITIONAL REQUIREMENTS SPECIFIC TO PARTICULAR RISKS

3.10.1. Respiratory protection

PPE intended for the protection of the respiratory system must make it possible to supply the user with breathable air when exposed to a polluted atmosphere and/or an atmosphere having an inadequate oxygen concentration.

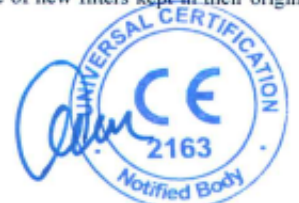
The breathable air supplied to the user by PPE must be obtained by appropriate means, for example after filtration of the polluted air through PPE or by supply from an external unpolluted source.

The constituent materials and other components of those types of PPE must be chosen or designed and incorporated so as to ensure appropriate user respiration and respiratory hygiene for the period of wear concerned under the foreseeable conditions of use.

The leak-tightness of the facepiece and the pressure drop on inspiration and, in the case of the filtering devices, purification capacity must keep contaminant penetration from a polluted atmosphere low enough not to be prejudicial to the health or hygiene of the user.

The PPE must bear details of the specific characteristics of the equipment which, in conjunction with the instructions, enable a trained and qualified user to employ the PPE correctly.

In the case of filtering equipment, the manufacturer's instructions must also indicate the time limit for the storage of new filters kept in their original packaging.



Conforming to EN 149:2001 + A1:2009 Standard Requirements

Article
5

Classification: Particle Filtering Half Mask

The mask subject to evaluation based on the test results and technical file provided by the manufacturer is classified as;
Filtering Efficiency and Maximum Total Inward Leakage: Classified as **FFP3**
Mask is classified for single shift use, **NR**

Article
7.4

Packing: Particle filtering half masks are packaged to protect them from contamination before use and with cardboard boxes to prevent mechanical damage. The packaging design and the product is considered to withstand the foreseeable conditions of use based on the visual inspection results given in the test report. Details given in Annex 4 of Technical File.

Article
7.5

Material: Materials used in particle filtering half masks, according to the simulated wearing treatment and temperature conditioning results; It is understood it withstands handling and wear over the period for which the particle filtering half mask is designed to be used, it suffered mechanical failure of the facepiece or straps, any material from the filter media released by the air flow through the filter has not constitute a hazard or nuisance for the wearer. The manufacturer declares that the materials used in manufacturing of the mask does not have an adverse affect to the health and safety of users. Manufacturer declares that the material do not have any adverse effect for the wearers health in Section 7 of the Technical File.

Based on the test results, the masks did not collapse when subject to simulated wearing and temarature conditioning. No nuisance situation is reported during the practical performance tests by human subjects.

The model have colored ones manufactured by use of colored spunbond fabrics in the most outer layer of the mask, with the earloops as well. Based on the test result in the test report of Shanghai Global Testing Services Co., Ltd., Report numbers THFJ20112528004R1-2EN for white, grey, black, blue and light pink REACH SVHC content reports.

Based on the results the colored materials (spunbond fabric) used in the most outer layer of the mask is considered to be safe for use on the mask. Annexed sample photos of the colored masks.

Article
7.6

Cleaning and Disinfection: Particle filtering half mask is **not** designed to be as re-usable. No cleaning or disinfection procedure provided by the manufacturer.

Article
7.7

Practical Performance:

The test report indicates that the human subjects did not face any difficulty in performing the excercises while they were weared by the sample masks, in walking test or work simulation tests. The wearers did not report any failure by means of head harness / straps/ ear loops comfort, security of fastenings and field of vision. Also no imperfections reported during total inward tests about the comfort, field of vision and fastening issues.

Assessed Elements	Positive	Negative	Requirements in accordance with EN 149:2001 + A1:2009 and Result
1.Face piece fitting	2	0	Positive results are obtained from the test subjects No imperfections
2.Head harness comfort	2	0	
3.Security of fastenings	2	0	
4.Field of vision	2	0	

Conditioning: (A.R.) As Received, original

Article
7.8

Finish of Parts: Particle filtering half masks, which are likely to come into contact with the user, do not have sharp edges and do not contain burrs.

Article
7.9.1

Total Inward Leakage:

The Total Inward Leakage test is conducted by 10 individual in an aerosol chamber with a walking band, and samples are taken during the conduction of the excercises defined in the standard. The samples used in the test are subjected to the conditioning required in the standard as temperature conditioning and as received. The face dimensions of the subjects are also reported. The measurement details for each subject and for each excersize are available in the test report.

It was reported that:
At least 49 out of the 50 exercise measurement results are smaller or equal to 5 %, the values varies between 1.675 % and 5.733 %.
At least 8 out of the 10 individual's arithmetic mean is smaller or equal to 2 %, the values varies between 1.869 % and 3.130 %.

According to the reported results, the product meets the limits for FFP3 classification.

Article
7.9.2

Penetration of filter material: Sodium Chloride Testing

Condition	No. of Sample	Sodium Chloride Testing 95 L/min max (%)	Requirements in accordance with EN 149:2001 + A1:2009	Result	
(A.R.)	11	0.004	FFP1 ≤ 20 %	Filtering half masks fulfill the requirements of the standard EN 149:2001 + A1:2009 given in 7.9.2 in range of the FFP1, FFP2 and FFP3 classes.	
(A.R.)	12	0.003			
(A.R.)	13	0.004			
(S.W.)	14	0.006	FFP2 ≤ 6 %		
(S.W.)	15	0.003			
(S.W.)	16	0.003	FFP3 ≤ 1 %		
(M.S. T.C.)	17	0.006			
(M.S. T.C.)	18	0.017			
(M.S. T.C.)	19	0.008			

Conditioning: (M.S.) Mechanical Strength
(T.C.) Temperature Conditioning
(A.R.) As Received, original
(S.W.) Simulated wearing treatment

95 L/min = 1,6 dm³.sn

Article 7.9.2	Penetration of filter material: Paraffin Oil Testing					
	Condition	No. of Sample	Paraffin Oil Testing 95 L/min max (%)	Requirements in accordance with EN 149:2001 + A1:2009	Result	
	(A.R.)	20	0.029	FFP1 ≤ 20 % FFP2 ≤ 6 % FFP3 ≤ 1 %	Filtering half masks fulfill the requirements of the standard EN EN 149:2001 + A1:2009 given in 7.9.2 in range of the FFP1, FFP2 and FFP3 classes.	
	(A.R.)	21	0.024			
	(A.R.)	22	0.022			
	(S.W.)	23	0.007			
	(S.W.)	24	0.014			
	(S.W.)	25	0.020			
	(M.S. T.C.)	26	0.705			
	(M.S. T.C.)	27	0.564			
(M.S. T.C.)	28	0.480				
Conditioning: (M.S.) Mechanical Strength (T.C.) Temperature Conditioning (A.R.) As Received, original (S.W.) Simulated wearing treatment						
Article 7.10	Compatibility with skin: In Practical Performance report, the likelihood of mask materials in contact with the skin causing irritation or other adverse effect on health was not reported.					
Article 7.11	Flammability:					
	Condition	No. of Sample	Visual inspection	Requirements in accordance with EN 149:2001 + A1:2009	Result	
	(A.R.)	29	Burn for 0 s	Filtering half mask shall not burn or not continue to burn for more than 5 s after removal from the flame	Passed Filtering half masks fulfill requirements of the standard	
	(A.R.)	30	Burn for 0 s			
	(T.C.)	31	Burn for 0 s			
(T.C.)	32	Burn for 0 s				
Conditioning: (A.R.) As Received, original (T.C.) Temperature Conditioning						
Article 7.12	Carbon dioxide content of the inhalation air:					
	Condition	No. of Sample	CO ₂ content of the inhalation air [%] by volume	An average CO ₂ content of the inhalation air	Requirements in accordance with EN 149:2001 + A1:2009	Result
	(A.R.)	33	0.70	0,70 [%]	CO ₂ content of the inhalation air shall not exceed an average of 1,0% by volume	Passed Filtering half masks fulfil requirements of the standard
	(A.R.)	34	0.72			
	(A.R.)	35	0.68			
Conditioning: (A.R.) As Received, original						
Article 7.13	Head harness: In Practical Performance and TIL test reports no adverse effects have been reported for donning and remove of the mask also the results of these tests indicates that the ear loops are capable of holding the mask firmly enough.					
Article 7.14	Field of vision: In Practical Performance report, no adverse effects were reported for the field of vision availability when the mask is worn.					
Article 7.15	Exhalation Valve(s): No exhalation valve exists.					
Article 7.16	Breathing Resistance: Inhalation					
	The overall evaluation in the figures gathered for 9 different samples 3 as received, 3 with temperature conditioning and 3 simulated wearing treatment conditioned samples complies with the limits given in the standard for FFP1, FFP2 and FFP3 classes. This is valid for inhalation results for 30 L/min, 95 L/min and exhalation at 160 L/min. Passed.					



Article 7.17	Clogging: This test is not applied to Particle Filtering Half Mask which is not reusable. (For single shift use devices, the clogging test is optional test. For re-usable devices test is mandatory.)
Article 7.18	Demountable Parts: There are no demountable parts on the product.
Article 8	Testing: All tests conducted according to Clause 8 of this standard is available in the test report and are evaluated in this report for qualification and classification of the mask.
Article 9	<p>Marking – Packaging: Necessary markings are available on the product package (box). The name and trademark of the manufacturer is stated to exist on the carton boxes. The type of the mask and the classification including the status of re-usability, the reference to EN 149:2001+A1:2009 standard, the year of end of shelf life, using and storage instructions and pictograms and CE mark are available on the product package. The above evaluation is based on the technical document for packaging and marking, for box design. Verified on the annex 4 of the technical file.</p> <p>The technical documentation for mask design (drawing) also evaluated for marking requirements, drawing Annex 3. The mask template (drawing) indicates that the mask will carry information about the brandname of the manufacturer, type of mask, the reference to EN 149+A1:2009 standard and classification including the re-usability of the mask. The manufacturer also printed CE mark with our Notified Body number. The mask do not have sub-assemblies. The tested samples by the laboratory do not carry necessary marking information, as stated in the technical documentation, the manufacturer shall follow marking instructions for serial production given in the technical file. MC-002 drawing, which exists in the technical file of the manufacturer, as Annex 3 of technical file.</p> <p>The manufacturer shall pay attention on the colored samples that the markings shall be easily readable on the mask.</p>
Article 10	Information to be supplied by the manufacturer: In each of the smallest commercially available packaging of the product, implementation (installation instructions) pre-use controls, warning and usage limitations, storage and meanings of symbols / pictograms are defined. User instruction document in the technical file found to be appropriate, Annex I. The manufacturer shall include this documented user information text in every smallest commercially available package.

PREPARED BY	APPROVED BY
Osman CAMCI PPE Expert 	Suat KAÇMAZ Director  



中国认可
国际互认
检测
TESTING
CNASL0354

TEST REPORT



Report No.: JKF20032861

**Applicant : QUANZHOU CITY MEICHEN PROTECTIVE
PRODUCTS CO.,LTD**

Zhejiang Academy of Science and Technology for Inspection and Quarantine

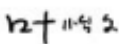
Add: No. 398, Jianshe 3 Road, Xiaoshan District, Hangzhou, Zhejiang, China

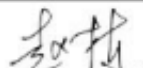
Tel: +86 0571 8352 7187/185/193 Website: www.zaiq.org.cn





The information are provided by client(applicant):				
Sample Information	Sample Name:	Filtering half mask		
	Style No.:	MC-002		
Customer Information	Applicant:	QUANZHOU CITY MEICHEN PROTECTIVE PRODUCTS CO.,LTD		
	Address:	NO.148,DINGXINCUO,XIN LAN VILLAGE,MEISHAN TOWN,NAN'AN QUANZHOU CITY,FUJIAN PROVINCE,CHINA/		
The information are confirmed by testing organization:				
Test Information	Date of sample received:	2020-11-26	Testing period:	2020-11-26 to 2020-12-02
	Quantity:	100 Pieces		
	Sample description:	White mask		
	Basis of judgment:	EN 149:2001+A1:2009 FFP3 NR Respiratory protective devices—Filtering half masks to protect against particles —Requirements, testing, marking		
Test Conclusion	The items tested meet the requirements of EN 149:2001+A1:2009 FFP3 NR			
Test Result	Please refer to next pages.			
Remark	/			

Edit: 
Ye yuwen

Sign: 
Zhao dong

*** End of this page***



Test Results:

Clause 7.5 Material

(EN 149:2001+A1:2009 Clause 8.2 & 8.3.1 & 8.3.2)

Requirement	Results	Rating
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.	Comply	Pass

Clause 7.6 Cleaning and disinfecting

(EN 149:2001+A1:2009 Clause 8.4 & 8.5 & 8.11)

Requirement	Results	Rating
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.	Not applicable (Not designed to be re-usable)	N/A

Clause 7.7 Practical performance

(EN 149:2001+A1:2009 Clause 8.4)

Requirement	Results	Rating
The particle filtering half mask shall undergo practical performance tests under realistic conditions. These general tests serve the purpose of checking the equipment for imperfections that cannot be determined by the tests described elsewhere in this standard.	No imperfections	Pass

Clause 7.8 Finish of parts

(EN 149:2001+A1:2009 Clause 8.2)

Requirement	Results	Rating
Parts of the device likely to come into contact with the wearer shall have no sharp edges or burrs.	No sharp edges or burrs	Pass

Clause 7.9.1 Total inward leakage

(EN 149:2001+A1:2009 Clause 8.5)

Requirement	Results	Rating
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	49 out of the 50 individual exercise $\leq 5\%$ 8 out of the 10 individual wearer arithmetic means $\leq 2\%$	Pass

Table 7.9.1-A Inward leakage test data

Subject	Sample No.	Condition	Walk (%)	Head side/side (%)	Head up/down (%)	Talk (%)	Walk (%)	Mean (%)
CQQ	1	As received	1.812	1.779	1.836	2.884	1.856	2.034
WLJ	2		1.741	1.740	1.780	2.780	1.837	1.975
WG	3		1.675	1.698	1.697	2.576	1.788	1.887
ZJH	4		1.694	1.723	1.677	2.493	1.759	1.869
TLB	5		1.749	1.789	1.734	2.500	1.786	1.912
ZMY	6	Temperature conditioned	1.764	1.813	1.801	2.521	1.841	1.948
LJF	7		1.734	1.773	1.813	2.537	1.864	1.944
HML	8		2.357	2.433	2.691	5.733	2.435	3.130
RK	9		1.731	1.726	1.792	2.583	1.841	1.935
ZD	10		1.795	1.763	1.822	2.745	1.847	1.994

Table 7.9.1-B Facial dimensions

Subject	Face Length (mm)	Face Width (mm)	Face Depth (mm)	Mouth Width (mm)
CQQ	136	167	125	65
WLJ	132	159	110	60
WG	120	152	109	57
ZJH	122	150	104	50
TLB	125	152	111	57
ZMY	137	150	120	60
LJF	125	135	90	55
HML	124	130	115	55
RK	112	161	146	50
ZD	116	160	115	55

Clause 7.9.2 Penetration of filter material

(EN 149:2001+A1:2009 Clause 8.11 & EN 13274-7:2019)

Requirement			Results	Rating
The penetration of the filter of the particle filtering half mask shall meet the requirements of the following table.			Detail refer to Table 7.9.2	Pass
Classification	Sodium chloride test 95 L/min	Paraffin oil test 95 L/min		
FFP1	≤20%	≤20%		
FFP2	≤6%	≤6%		
FFP3	≤1%	≤1%		

Table 7.9.2 Penetration of filter material

Aerosol	Condition	Sample No.	Penetration (%)
Sodium chloride test	As received	11	0.004
		12	0.003
		13	0.004
	Simulated wearing treatment	14	0.006
		15	0.003
		16	0.003
	Mechanical strength+ Temperature conditioned	17	0.006
		18	0.017
		19	0.008
Paraffin oil test	As received	20	0.029
		21	0.024
		22	0.022
	Simulated wearing treatment	23	0.007
		24	0.014
		25	0.020
	Mechanical strength+ Temperature conditioned	26	0.705
		27	0.564
		28	0.480
Flow conditioning: single filter: 95.0 L/min			

Clause 7.10 Compatibility with skin

(EN 149:2001+A1:2009 Clause 8.4 & 8.5)

Requirement	Results	Rating
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.	No irritation or any other adverse effect to health	Pass

Clause 7.11 Flammability

(EN 149:2001+A1:2009 Clause 8.6)

Requirement	Results	Rating
When tested, the particle filtering half mask shall not burn or not to continue to burn for more than 5s after removal from the flame.	Detail refer to Table 7.11	Pass

Table 7.11 Flammability

Condition	Sample No.	Result
As received	29	Not burn
	30	Not burn
Temperature conditioned	31	Not burn
	32	Not burn

Clause 7.12 Carbon dioxide content of the inhalation air

(EN 149:2001+A1:2009 Clause 8.7)

Requirement	Results	Rating
The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1.0 % (by volume).	Detail refer to Table 7.12	Pass

Table 7.12 Carbon dioxide content of the inhalation air

Condition	Sample No.	Result (%)	
As received	33	0.70	Mean value: 0.70
	34	0.72	
	35	0.68	

Clause 7.13 Head harness

(EN 149:2001+A1:2009 Clause 8.4 & 8.5)

Requirement	Results	Rating
<p>The head harness shall be designed so that the particle filtering half mask can be donned and removed easily.</p> <p>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.</p>	Comply	Pass

Clause 7.14 Field of vision

(EN 149:2001+A1:2009 Clause 8.4)

Requirement	Results	Rating
The field of vision is acceptable if determined so in practical performance tests.	Comply	Pass

Clause 7.15 Exhalation valve

(EN 149:2001+A1:2009 Clause 8.2 & 8.9.1 & 8.3.4 & 8.8)

Requirement	Results	Rating
<p>A particle filtering half mask may have one or more exhalation valve(s), which shall function correctly in all orientations.</p> <p>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.</p> <p>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.</p> <p>When the exhalation valve housing is attached to the faceblank, it shall withstand axially a tensile force of 10 N applied for 10 s.</p>	Not applicable (No exhalation valve)	N/A

Clause 7.16 Breathing resistance

(EN 149:2001+A1:2009 Clause 8.9)

Requirement				Results	Rating				
The penetration of the filter of the particle filtering half mask shall meet the requirements of the following table.				Detail refer to Table 7.16	Pass				
						Classification	Maximum permitted resistance (mbar)		
							Inhalation		Exhalation
							30L/min	95L/min	160L/min
						FFP1	0.6	2.1	3.0
						FFP2	0.7	2.4	3.0
						FFP3	1.0	3.0	3.0

Table 7.16 Breathing resistance (mbar)

Test item	Condition	Sample No.	A	B	C	D	E
Inhalation (30 L/min)	As received	36	0.51	0.51	0.51	0.51	0.51
		37	0.47	0.47	0.48	0.48	0.47
		38	0.52	0.52	0.50	0.50	0.51
	Simulated wearing treatment	39	0.51	0.51	0.51	0.51	0.51
		40	0.52	0.53	0.53	0.52	0.52
		41	0.49	0.49	0.49	0.50	0.49
	Temperature conditioned	42	0.47	0.47	0.47	0.47	0.47
		43	0.45	0.45	0.45	0.45	0.45
		44	0.53	0.52	0.52	0.52	0.52



Test item	Condition	Sample No.	A	B	C	D	E
Inhalation (95 L/min)	As received	36	1.88	1.88	1.88	1.89	1.88
		37	1.80	1.77	1.79	1.80	1.78
		38	1.85	1.85	1.85	1.84	1.85
	Simulated wearing treatment	39	1.87	1.88	1.88	1.87	1.87
		40	2.02	2.03	2.02	2.03	2.02
		41	1.85	1.84	1.83	1.85	1.84
	Temperature conditioned	42	1.78	1.78	1.78	1.78	1.78
		43	1.71	1.70	1.71	1.72	1.70
		44	1.92	1.91	1.92	1.93	1.93
Exhalation (160 L/min)	As received	36	2.67	2.68	2.70	2.68	2.68
		37	2.60	2.58	2.61	2.60	2.61
		38	2.61	2.62	2.60	2.61	2.61
	Simulated wearing treatment	39	2.66	2.68	2.67	2.68	2.67
		40	2.71	2.71	2.70	2.70	2.71
		41	2.63	2.63	2.63	2.62	2.62
	Temperature conditioned	42	2.47	2.45	2.45	2.45	2.46
		43	2.48	2.47	2.48	2.47	2.47
		44	2.50	2.50	2.52	2.51	2.51

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

Clause 7.17 Clogging

(EN 149:2001+A1:2009 Clause 8.9 & 8.10)

Requirement	Results	Rating
7.17.2 Breathing resistance: 7.17.2.1 Valved particle filtering half masks After clogging the inhalation resistances shall not exceed FFP1:4mbar, FFP2:5mbar, FFP3:7mbar at 95 L/min continuous flow; The exhalation resistance shall not exceed 3mbar at 160 L/min continuous flow. 7.17.2.2 Valveless particle filtering half masks After clogging the inhalation and exhalation resistances shall not exceed FFP1:3mbar, FFP2:4mbar, FFP3:5mbar at 95 L/min continuous flow. 7.17.3 Penetration of filter material: All types (valved and valveless) of particle filtering half masks claimed to meet the clogging requirement shall also meet the requirements given in 7.9.2, for the Penetration test according to EN 13274-7, after the clogging treatment.	Optional for single shift device only	Not required

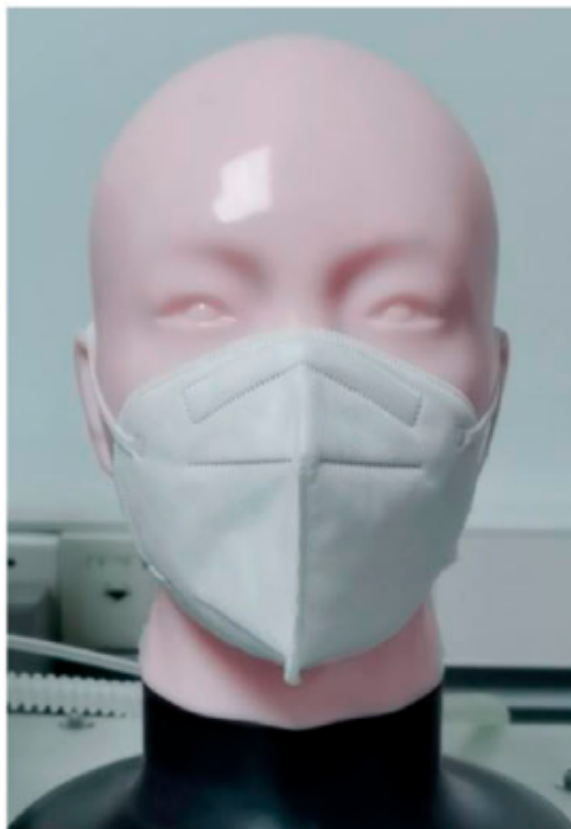
Clause 7.18 Demountable parts

(EN 149:2001+A1:2009 Clause 8.2)

Requirement	Results	Rating
All demountable parts (if fitted) shall be readily connected and secured, where possible by hand.	Comply	Pass



Sample photo



*** End of Report***

STATEMENT

1. Our organization guarantees impartiality, independence and honesty of inspection, and is responsible for the content of report, except for the information provided by the client. The client shall not use the test results for improper publicity without authorization.
2. Our organization shall not be responsible for the authenticity of the information provided by the client, nor shall bear the risks arising in the process of sample delivery. Test result is only responsible for the sample.
3. This report is invalid without the dedicated seal for inspection and testing report and the paging seal.
4. This report is invalid without the signature of the approver (authorized signatory).
5. Test report is invalid if altered.
6. The duplicate report without the "dedicated seal for inspection and testing" of the institution is invalid.
7. Each page of the report is an integral part of the report. Our organization shall not be responsible for any misunderstanding or consequences arising from the improper use of the test report by the user.
8. Without the CMA seal, the report is invalid for social certification.

Test institute: Zhejiang Academy of Science and Technology for Inspection and Quarantine

Add: No. 398, Jianshe 3 Road, Xiaoshan District, Hangzhou, Zhejiang, China

Tel: +86 0571 8352 7187/185/193

Website: www.zaiq.org.cn

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

The following information was/were submitted and identified by/on behalf of the client:

Applicant : QUANZHOU CITY MEICHEN PROTECTIVE PRODUCTS CO.,LTD.
Address : NO.148,DINGXINCUO,XIN LAN VILLAGE,MEISHAN TOWN,NAN'AN QUANZHOU CITY,FUJIAN PROVINCE,CHINA
Sample Name : Filtering half mask
Sample Model : MC-002
Sample Receive Date : Nov. 30, 2020
Sample Testing Period : Nov. 30, 2020 to Dec. 4, 2020

Test Result Summary:

As requested by the applicant, for details refer to attached page(s).

TEST ITEM(S)	TEST REQUESTED	RESULT(S)
Two hundred and nine(209) substances content in SVHC	1.Two hundred and five (205) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on and before Jan 16, 2020 regarding Regulation (EC) No 1907/2006 concerning the REACH. 2.Four (4) substances in the Public Consultation List of potential Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) on June 16, 2020 regarding Regulation (EC) No 1907/2006 concerning the REACH.	LESS THAN 0.1% (w/w)

Authorized Signature  
Shi Lei/Kevin
General Manager -GTS/SHO

Page 1 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China
Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: <http://www.gts-lab.com>

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

Test Result(s):

Test Sample Description:

Material No.	Material Description
<u>01</u>	1.Blue fabric+2.Blue fabric+3.Black rubber band+4.Blue fabric+5.Blue fabric+ 6.Blue rubber band+7.Pink fabric+8.Pink fabric+9.Pink rubber band+ 10.Grey fabric+11.Grey fabric+12.Grey rubber band+13.White fabric
<u>02</u>	14.White plastic
<u>03</u>	15.Silver metal

SVHC content

Reference Method:

- 1) US EPA 3540C: 1996 & US EPA 8270D: 2007
- 2) US EPA 3550C: 2007 & US EPA 8270D: 2007
- 3) US EPA 3050B: 1996 & US EPA 6010C: 2007
- 4) US EPA 3052: 1996 & US EPA 6010C: 2007
- 5) US EPA 3060A: 1996 & US EPA 7196A: 1992
- 6) US EPA 3550C: 2007 & US EPA 8321B: 2007
- 7) US EPA 8260B: 1996
- 8) ISO 3613: 2010
- 9) EN 14582: 2016
- 10) EN ISO 14362-1: 2017

Page 2 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China
Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: http://www.gts-lab.com

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

NO.	Substance Name	CAS No.	EC No.	RL(%)	Result(s)		
					01	02	03
1	Anthracene	120-12-7	204-371-1	0.020	N.D.	N.D.	N.D.
2	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	202-974-4	0.020	N.D.	N.D.	N.D.
3	Dibutyl phthalate (DBP)	84-74-2	201-557-4	0.020	N.D.	N.D.	N.D.
4	Cobalt dichloride*	7646-79-9	231-589-4	0.005	N.D.	N.D.	N.D.
5	Diarsenic pentaoxide*	1303-28-2	215-116-9	0.005	N.D.	N.D.	N.D.
6	Diarsenic trioxide*	1327-53-3	215-481-4	0.005	N.D.	N.D.	N.D.
7	Sodium dichromate*	7789-12-0, 10588-01-9	234-190-3	0.005	N.D.	N.D.	N.D.
8	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	0.020	N.D.	N.D.	N.D.
9	Hexabromocyclododecane (HBCDD)	25637-99-4 , 3194-55-6	247-148-4, 221-695-9	0.020	N.D.	N.D.	N.D.
10	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5	0.020	N.D.	N.D.	N.D.
11	Bis(tributyltin)oxide (TBTO)	56-35-9	200-268-0	0.020	N.D.	N.D.	N.D.
12	Lead hydrogen arsenate*	7784-40-9	232-064-2	0.005	N.D.	N.D.	N.D.
13	Triethyl arsenate*	15606-95-8	427-700-2	0.005	N.D.	N.D.	N.D.
14	Benzyl butyl phthalate (BBP)	85-68-7	201-622-7	0.020	N.D.	N.D.	N.D.
15	Anthracene oil	90640-80-5	292-602-7	0.020	N.D.	N.D.	N.D.
16	Anthracene oil, anthracene paste, distr. Lights	91995-17-4	295-278-5	0.020	N.D.	N.D.	N.D.
17	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9	0.020	N.D.	N.D.	N.D.
18	Anthracene oil, anthracene-low	90640-82-7	292-604-8	0.020	N.D.	N.D.	N.D.
19	Anthracene oil, anthracene paste	90640-81-6	292-603-2	0.020	N.D.	N.D.	N.D.
20	Pitch, coal tar, high temp.	65996-93-2	266-028-2	0.020	N.D.	N.D.	N.D.
21	Diisobutyl phthalate (DIBP)	84-69-5	201-553-2	0.020	N.D.	N.D.	N.D.
22	2,4-Dinitrotoluene	121-14-2	204-450-0	0.020	N.D.	N.D.	N.D.
23	Tris(2-chloroethyl) phosphate	115-96-8	204-118-5	0.020	N.D.	N.D.	N.D.
24	Lead chromate*	7758-97-6	231-846-0	0.005	N.D.	N.D.	N.D.
25	Lead chromate molybdate sulphate red (C.I. Pigment Red 104) *	12656-85-8	235-759-9	0.005	N.D.	N.D.	N.D.
26	Lead sulfochromate yellow (C.I. Pigment Yellow 34) *	1344-37-2	215-693-7	0.005	N.D.	N.D.	N.D.
27	Acrymide	79-06-1	201-173-7	0.020	N.D.	N.D.	N.D.

Page 3 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: http://www.gts-lab.com

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

NO.	Substance Name	CAS No.	EC No.	RL(%)	Result(s)		
					01	02	03
28	Trichloroethylene	79-01-6	201-167-4	0.020	N.D.	N.D.	N.D.
29	Boric acid*	10043-35-3 1113-50-1	233-139-2, 234-343-4	0.005	N.D.	N.D.	N.D.
30	Disodium tetraborate, anhydrous*	1303-96-4, 1330-43-4, 12179-04-3	215-540-4	0.005	N.D.	N.D.	N.D.
31	Tetraboron disodium heptaoxide, hydrate*	12267-73-1	235-541-3	0.005	N.D.	N.D.	N.D.
32	Sodium chromate*	7775-11-3	231-889-5	0.005	N.D.	N.D.	N.D.
33	Ammonium dichromate*	7789-09-5	232-143-1	0.005	N.D.	N.D.	N.D.
34	Potassium chromate*	7789-00-6	232-140-5	0.005	N.D.	N.D.	N.D.
35	Potassium dichromate*	7778-50-9	231-906-6	0.005	N.D.	N.D.	N.D.
36	Cobalt(II) sulphate*	10124-43-3	233-334-2	0.005	N.D.	N.D.	N.D.
37	Cobalt(II) dinitrate*	10141-05-6	233-402-1	0.005	N.D.	N.D.	N.D.
38	Cobalt(II) carbonate*	513-79-1	208-169-4	0.005	N.D.	N.D.	N.D.
39	Cobalt(II) diacetate*	71-48-7	200-755-8	0.005	N.D.	N.D.	N.D.
40	2-Methoxyethanol	109-86-4	203-713-7	0.020	N.D.	N.D.	N.D.
41	2-Ethoxyethanol	110-80-5	203-804-1	0.020	N.D.	N.D.	N.D.
42	Chromium trioxide*	1333-82-0	215-607-8	0.005	N.D.	N.D.	N.D.
43	Chromic acid, dichromic acid, Oligomers of chromic acid, and dichromic acid*	7738-94-5, 13530-68-2	231-801-5, 236-881-5	0.005	N.D.	N.D.	N.D.
44	Strontium chromate*	7789-06-2	232-142-6	0.005	N.D.	N.D.	N.D.
45	2-ethoxyethyl acetate	111-15-9	203-839-2	0.020	N.D.	N.D.	N.D.
46	Hydrazine	302-01-2, 7803-57-8	206-114-9	0.020	N.D.	N.D.	N.D.
47	1-Methyl-2-pyrrolidone	872-50-4	212-828-1	0.020	N.D.	N.D.	N.D.
48	1,2,3-trichloropropane	96-18-4	202-486-1	0.020	N.D.	N.D.	N.D.
49	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	271-084-6	0.020	N.D.	N.D.	N.D.
50	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	276-158-1	0.020	N.D.	N.D.	N.D.
51	Dichromium tris(chromate) *	24613-89-6	246-356-2	0.005	N.D.	N.D.	N.D.
52	Potassium hydroxy-octaoxidizincatedichromate*	11103-86-9	234-329-8	0.005	N.D.	N.D.	N.D.
53	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	0.005	N.D.	N.D.	N.D.

Page 4 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: http://www.gts-lab.com

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

NO.	Substance Name	CAS No.	EC No.	RL(%)	Result(s)		
					01	02	03
54	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) *	Index number: 650-017-00-8		0.005	N.D.	N.D.	N.D.
55	Aluminosilicate Refractory Ceramic Fibres (RCF) *	Index number: 650-017-00-8		0.005	N.D.	N.D.	N.D.
56	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	500-036-1	0.020	N.D.	N.D.	N.D.
57	Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6	0.020	N.D.	N.D.	N.D.
58	2-Methoxyaniline /o-Anisidine	90-04-0	201-963-1	0.020	N.D.	N.D.	N.D.
59	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	205-426-2	0.020	N.D.	N.D.	N.D.
60	1,2-Dichloroethane	107-06-2	203-458-1	0.020	N.D.	N.D.	N.D.
61	Bis(2-methoxyethyl) ether	111-96-6	203-924-4	0.020	N.D.	N.D.	N.D.
62	Arsenic acid*	7778-39-4	231-901-9	0.005	N.D.	N.D.	N.D.
63	Calcium arsenate*	7778-44-1	231-904-5	0.005	N.D.	N.D.	N.D.
64	Trilead diarsenate*	3687-31-8	222-979-5	0.005	N.D.	N.D.	N.D.
65	N,N-dimethylacetamide	127-19-5	204-826-4	0.020	N.D.	N.D.	N.D.
66	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	202-918-9	0.020	N.D.	N.D.	N.D.
67	Phenolphthalein	77-09-8	201-004-7	0.020	N.D.	N.D.	N.D.
68	Lead diazide, Lead azide*	13424-46-9	236-542-1	0.005	N.D.	N.D.	N.D.
69	Lead styphnate*	15245-44-0	239-290-0	0.005	N.D.	N.D.	N.D.
70	Lead dipicrate*	6477-64-1	229-335-2	0.005	N.D.	N.D.	N.D.
71	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	203-977-3	0.020	N.D.	N.D.	N.D.
72	Lead(II) bis(methanesulfonate)	17570-76-2	401-750-5	0.005	N.D.	N.D.	N.D.
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether(EGDME)	110-71-4	203-794-9	0.020	N.D.	N.D.	N.D.
74	Diboron trioxide*	1303-86-2	215-125-8	0.005	N.D.	N.D.	N.D.
75	Formamide	75-12-7	200-842-0	0.020	N.D.	N.D.	N.D.
76	1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6-trione (TGIC)	2451-62-9	219-514-3	0.020	N.D.	N.D.	N.D.
77	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	423-400-0	0.020	N.D.	N.D.	N.D.
78	4,4'-bis(dimethylamino) benzophenone	90-94-8	202-027-5	0.020	N.D.	N.D.	N.D.
79	N,N,N',N'-tetramethyl-4,4'-methylenedianiline	101-61-1	202-959-2	0.020	N.D.	N.D.	N.D.
80	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]	2580-56-5	219-943-6	0.020	N.D.	N.D.	N.D.

Page 5 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: http://www.gts-lab.com

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

NO.	Substance Name	CAS No.	EC No.	RL(%)	Result(s)		
					01	02	03
	dimethylammonium chloride (C.I. Basic Blue 26)						
81	[[4-[4,4'-bis(dimethylamino) benz -hydridene]cyclohexa -2,5-dien -1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	208-953-6	0.020	N.D.	N.D.	N.D.
82	4,4'-bis(dimethylamino)-4" -(methylamino)trityl alcohol	561-41-1	209-218-2	0.020	N.D.	N.D.	N.D.
83	α,α -Bis[4-(dimethylamino)phenyl] -4(phenylamino)naphthalene- 1-methanol (C.I. Solvent Blue 4)	6786-83-0	229-851-8	0.020	N.D.	N.D.	N.D.
84	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1	0.005	N.D.	N.D.	N.D.
85	6-methoxy-m-toluidine(p-cresidine)	120-71-8	204-419-1	0.020	N.D.	N.D.	N.D.
86	Henicosfluoroundecanoic acid	2058-94-8	218-165-4	0.020	N.D.	N.D.	N.D.
87	Hexahydromethylphthalic anhydride [1], Hexahydro-4- methylphthalic anhydride [2], Hexahydro- 1-methylphthalic anhydride [3], Hexahydro- 3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	25550-51-0 19438-60-9 48122-14-1 57110-29-9	247-094-1, 243-072-0, 256-356-4, 260-566-1	0.020	N.D.	N.D.	N.D.
88	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane- 1,2-dicarboxylic anhydride [2], trans-cyclohexane- 1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	85-42-7, 13149-00-3 14166-21-3	201-604-9, 236-086-3, 238-009-9	0.020	N.D.	N.D.	N.D.
89	Dibutyltin dichloride(DBTC)	683-18-1	211-670-0	0.020	N.D.	N.D.	N.D.
90	Lead bis(tetrafluoroborate) *	13814-96-5	237-486-0	0.005	N.D.	N.D.	N.D.
91	Lead dinitrate*	10099-74-8	233-245-9	0.005	N.D.	N.D.	N.D.
92	Silicic acid, lead salt*	11120-22-2	234-363-3	0.005	N.D.	N.D.	N.D.
93	4-Aminoazobenzene	60-09-3	200-453-6	0.020	N.D.	N.D.	N.D.
94	Lead titanium zirconium oxide*	12626-81-2	235-727-4	0.005	N.D.	N.D.	N.D.
95	Lead monoxide (lead oxide) *	1317-36-8	215-267-0	0.005	N.D.	N.D.	N.D.
96	o-Toluidine	95-53-4	202-429-0	0.020	N.D.	N.D.	N.D.
97	3-ethyl-2-methyl-2-(3-methylbutyl)- 1,3-oxazolidine	143860-04-2	421-150-7	0.020	N.D.	N.D.	N.D.
98	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped [with lead (Pb) content above the	68784-75-8	272-271-5	0.005	N.D.	N.D.	N.D.

Page 6 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: http://www.gts-lab.com

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

NO.	Substance Name	CAS No.	EC No.	RL(%)	Result(s)		
					01	02	03
	applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008] *						
99	Trilead bis(carbonate) dihydroxide*	1319-46-6	215-290-6	0.005	N.D.	N.D.	N.D.
100	Furan	110-00-9	203-727-3	0.020	N.D.	N.D.	N.D.
101	N,N-dimethylformamide	68-12-2	200-679-5	0.020	N.D.	N.D.	N.D.
102	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	-	0.020	N.D.	N.D.	N.D.
103	4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	-	0.020	N.D.	N.D.	N.D.
104	4,4'-methylenedi-o-toluidine	838-88-0	212-658-8	0.020	N.D.	N.D.	N.D.
105	Diethyl sulphate	64-67-5	200-589-6	0.020	N.D.	N.D.	N.D.
106	Dimethyl sulphate	77-78-1	201-058-1	0.020	N.D.	N.D.	N.D.
107	Lead oxide sulfate*	12036-76-9	234-853-7	0.005	N.D.	N.D.	N.D.
108	Lead titanium trioxide*	12060-00-3	235-038-9	0.005	N.D.	N.D.	N.D.
109	Acetic acid, lead salt, basic*	51404-69-4	257-175-3	0.005	N.D.	N.D.	N.D.
110	[Phthalato(2-)] dioxotrilead	69011-06-9	273-688-5	0.020	N.D.	N.D.	N.D.
111	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	214-604-9	0.020	N.D.	N.D.	N.D.
112	N-methylacetamide	79-16-3	201-182-6	0.020	N.D.	N.D.	N.D.
113	Dinoseb (6-sec-butyl-2,4- dinitrophenol)	88-85-7	201-861-7	0.020	N.D.	N.D.	N.D.
114	1,2-Diethoxyethane	629-14-1	211-076-1	0.020	N.D.	N.D.	N.D.
115	Tetralead trioxide sulphate	12202-17-4	235-380-9	0.020	N.D.	N.D.	N.D.
116	N-pentyl-isopentyl phthalate	776297-69-9	-	0.020	N.D.	N.D.	N.D.
117	Dioxobis(stearato)trilead*	12578-12-0	235-702-8	0.005	N.D.	N.D.	N.D.
118	Tetraethyllead*	78-00-2	201-075-4	0.005	N.D.	N.D.	N.D.
119	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	0.005	N.D.	N.D.	N.D.

Page 7 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: http://www.gts-lab.com

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

NO.	Substance Name	CAS No.	EC No.	RL(%)	Result(s)		
					01	02	03
120	Pentacosafuorotridecanoic acid	72629-94-8	276-745-2	0.020	N.D.	N.D.	N.D.
121	Tricosafuorododecanoic acid	307-55-1	206-203-2	0.020	N.D.	N.D.	N.D.
122	Heptacosafuorotetradecanoic acid	376-06-7	206-803-4	0.020	N.D.	N.D.	N.D.
123	1-bromopropane (n-propyl bromide)	106-94-5	203-445-0	0.020	N.D.	N.D.	N.D.
124	Methoxyacetic acid	625-45-6	210-894-6	0.020	N.D.	N.D.	N.D.
125	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	202-453-1	0.020	N.D.	N.D.	N.D.
126	Methyloxirane (Propylene oxide)	75-56-9	200-879-2	0.020	N.D.	N.D.	N.D.
127	Trilead dioxide phosphonate*	12141-20-7	235-252-2	0.005	N.D.	N.D.	N.D.
128	o-aminoazotoluene	97-56-3	202-591-2	0.020	N.D.	N.D.	N.D.
129	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	284-032-2	0.020	N.D.	N.D.	N.D.
130	4,4'-oxydianiline and its salts	101-80-4	202-977-0	0.020	N.D.	N.D.	N.D.
131	Orange lead (lead tetroxide)*	1314-41-6	215-235-6	0.005	N.D.	N.D.	N.D.
132	Biphenyl-4-ylamine	92-67-1	202-177-1	0.020	N.D.	N.D.	N.D.
133	Diisopentylphthalate	605-50-5	210-088-4	0.020	N.D.	N.D.	N.D.
134	Fatty acids, C16-18, lead salts	91031-62-8	292-966-7	0.020	N.D.	N.D.	N.D.
135	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8	0.020	N.D.	N.D.	N.D.
136	Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1	0.005	N.D.	N.D.	N.D.
137	Lead cyanamidate*	20837-86-9	244-073-9	0.005	N.D.	N.D.	N.D.
138	4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	-	-	0.020	N.D.	N.D.	N.D.
139	Cadmium	7440-43-9	231-152-8	0.005	N.D.	N.D.	N.D.
140	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	223-320-4	0.020	N.D.	N.D.	N.D.
141	Pentadecafluorooctanoic acid (PFOA)	335-67-1	206-397-9	0.020	N.D.	N.D.	N.D.
142	Dipentyl phthalate (DPP)	131-18-0	205-017-9	0.020	N.D.	N.D.	N.D.
143	Cadmium oxide*	1306-19-0	215-146-2	0.005	N.D.	N.D.	N.D.
144	Cadmium sulphide*	1306-23-6	215-147-8	0.005	N.D.	N.D.	N.D.

Page 8 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: http://www.gts-lab.com

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

NO.	Substance Name	CAS No.	EC No.	RL(%)	Result(s)		
					01	02	03
145	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	217-710-3	0.020	N.D.	N.D.	N.D.
146	Dihexyl phthalate (DHP)	84-75-3	201-559-5	0.020	N.D.	N.D.	N.D.
147	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	202-506-9	0.020	N.D.	N.D.	N.D.
148	Trixylyl phosphate	25155-23-1	246-677-8	0.020	N.D.	N.D.	N.D.
149	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	209-358-4	0.020	N.D.	N.D.	N.D.
150	Lead di(acetate)*	301-04-2	206-104-4	0.005	N.D.	N.D.	N.D.
151	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	271-093-5	0.020	N.D.	N.D.	N.D.
152	Sodium perborate; perboric acid, sodium salt*	-	239-172-9, 234-390-0	0.005	N.D.	N.D.	N.D.
153	Sodium peroxometaborate*	7632-04-4	231-556-4	0.005	N.D.	N.D.	N.D.
154	Cadmium chloride*	10108-64-2	233-296-7	0.005	N.D.	N.D.	N.D.
155	Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	204-211-0	0.020	N.D.	N.D.	N.D.
156	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	223-346-6	0.020	N.D.	N.D.	N.D.
157	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	239-622-4	0.020	N.D.	N.D.	N.D.
158	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	-	0.020	N.D.	N.D.	N.D.
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol(UV-328)	25973-55-1	247-384-8	0.020	N.D.	N.D.	N.D.
160	Cadmium fluoride*	7790-79-6	232-222-0	0.005	N.D.	N.D.	N.D.
161	Cadmium sulphate*	10124-36-4 31119-53-6	233-331-6	0.005	N.D.	N.D.	N.D.
162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	68515-51-5 68648-93-1	271-094-0, 272-013-1	0.020	N.D.	N.D.	N.D.
163	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6	--	--	0.020	N.D.	N.D.	N.D.

Page 9 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: http://www.gts-lab.com

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

NO.	Substance Name	CAS No.	EC No.	RL(%)	Result(s)		
					01	02	03
	-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]						
164	1,3-propanesultone	1120-71-4	214-317-9	0.020	N.D.	N.D.	N.D.
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	223-383-8	0.020	N.D.	N.D.	N.D.
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1	0.020	N.D.	N.D.	N.D.
167	Nitrobenzene	98-95-3	202-716-0	0.020	N.D.	N.D.	N.D.
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1, 21049-39-8 , 4149-60-4	206-801-3	0.020	N.D.	N.D.	N.D.
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5	0.020	N.D.	N.D.	N.D.
170	4,4'-isopropylidenediphenol (Bisphenol A)	80-05-7	201-245-8	0.020	N.D.	N.D.	N.D.
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	--	--	0.020	N.D.	N.D.	N.D.
172	4-Heptylphenol, branched and linear	--	--	0.020	N.D.	N.D.	N.D.
173	p-(1,1-dimethylpropyl) phenol	80-46-6	201-280-9	0.020	N.D.	N.D.	N.D.
174	Perfluorohexyl sulfonic acid and its salts (PFHxS)	--	--	0.020	N.D.	N.D.	N.D.
175	Chrysene	218-01-9, 1719-03-5	205-923-4	0.020	N.D.	N.D.	N.D.
176	Benz[a]anthracene	56-55-3, 1718-53-2	200-280-6	0.020	N.D.	N.D.	N.D.
177	Cadmium nitrate*	10022-68-1 , 10325-94-7	233-710-6	0.005	N.D.	N.D.	N.D.
178	Cadmium carbonate*	513-78-0	208-168-9	0.005	N.D.	N.D.	N.D.
179	Cadmium hydroxide*	21041-95-2	244-168-5	0.005	N.D.	N.D.	N.D.
180	Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus™") [covering any of its individual anti- and syn-isomers or any combination thereof]	-	-	0.020	N.D.	N.D.	N.D.
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPb)]	-	-	0.020	N.D.	N.D.	N.D.
182	Benzene-1,2,4-tricarboxylic acid 1,2-anhydride (trimellitic anhydride) (TMA)	552-30-7	209-008-0	0.020	N.D.	N.D.	N.D.

Page 10 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: http://www.gts-lab.com

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

NO.	Substance Name	CAS No.	EC No.	RL(%)	Result(s)		
					01	02	03
183	Dicyclohexyl phthalate(DCHP)	84-61-7	201-545-9	0.020	N.D.	N.D.	N.D.
184	Benzo[ghi]perylene	191-24-2	205-883-8	0.020	N.D.	N.D.	N.D.
185	Decamethylcyclopentasiloxane(D5)	541-02-6	208-764-9	0.020	N.D.	N.D.	N.D.
186	Disodium octaborate*	12008-41-2 , 12280-03-4	234-541-0	0.005	N.D.	N.D.	N.D.
187	Dodecamethylcyclohexasiloxane(D6)	540-97-6	208-762-8	0.020	N.D.	N.D.	N.D.
188	Ethylenediamine(EDA)	107-15-3	203-468-6	0.020	N.D.	N.D.	N.D.
189	Lead*	7439-92-1	231-100-4	0.005	N.D.	N.D.	N.D.
190	Octamethylcyclotetrasiloxane(D4)	556-67-2	209-136-7	0.020	N.D.	N.D.	N.D.
191	Terphenyl, hydrogenated	61788-32-7	262-967-7	0.020	N.D.	N.D.	N.D.
192	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one; 3-benzylidene camphor; 3-BC	15087-24-8	239-139-9	0.020	N.D.	N.D.	N.D.
193	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	401-720-1	0.020	N.D.	N.D.	N.D.
194	Benzo[k]fluoranthene	207-08-9	205-916-6	0.020	N.D.	N.D.	N.D.
195	Fluoranthene	206-44-0; 93951-69-0	205-912-4	0.020	N.D.	N.D.	N.D.
196	Phenanthrene	85-01-8	201-581-5	0.020	N.D.	N.D.	N.D.
197	Pyrene	129-00-0; 1718-52-1	204-927-3	0.020	N.D.	N.D.	N.D.
198	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, its salts and its acyl halides	-	-	0.020	N.D.	N.D.	N.D.
199	2-methoxyethyl acetate	110-49-6	203-772-9	0.020	N.D.	N.D.	N.D.
200	Tris(4-nonylphenyl, branched and linear) phosphite(TNPP)	-	-	0.020	N.D.	N.D.	N.D.
201	4-nonylphenyl, branched and linear, ethoxylated	202-679-0	98-54-4	0.020	N.D.	N.D.	N.D.
202	Perfluorobutane sulfonic acid (PFBS) and its salts	-	-	0.020	N.D.	N.D.	N.D.
203	Diisohexyl phthalate	71850-09-4	276-090-2	0.020	N.D.	N.D.	N.D.
204	2-benzy-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	404-360-3	0.020	N.D.	N.D.	N.D.
205	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	400-600-6	0.020	N.D.	N.D.	N.D.
206	1-vinylimidazole	1072-63-5	214-012-0	0.010	N.D.	N.D.	N.D.

Page 11 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: http://www.gts-lab.com

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

NO.	Substance Name	CAS No.	EC No.	RL(%)	Result(s)		
					01	02	03
#							
207 #	2-methylimidazole	693-98-1	211-765-7	0.010	N.D.	N.D.	N.D.
208 #	Butyl 4-hydroxybenzoate	94-26-8	202-318-7-4	0.010	N.D.	N.D.	N.D.
209 #	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	245-152-0	0.010	N.D.	N.D.	N.D.

- Note:**
1. 1000mg/kg = 0.1%;
 2. RL = Report Limit;
 3. N.D. = Not Detected(<RL);
 4. "*" = The test result is based on the calculation of selected element(s) / marker(s) and to the worst case;
 5. The detail information for the SVHC published at website of ECHA:
http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp
 6. In accordance with Regulation (EC) No. 1907/2006, any producer or importer of articles shall notify ECHA, in accordance with paragraph 4 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation, namely (a) the substance is present in those article in quantities totaling over one ton per producer or importer per year; and (b) the substance is present in those articles above a concentration of 0.1% weight by weight (w/w);
 7. Article 33 of Regulation (EC) No. 1907/2006 requires supplier of an article containing a substance meets the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance;
 8. For sample(s) 01, composite test has been performed as per client's request and the test result is the overall result.
 9. #: Four proposals to identify substances of very high concern(SVHCs)

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020

Sample Photo(s):



Page 13 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

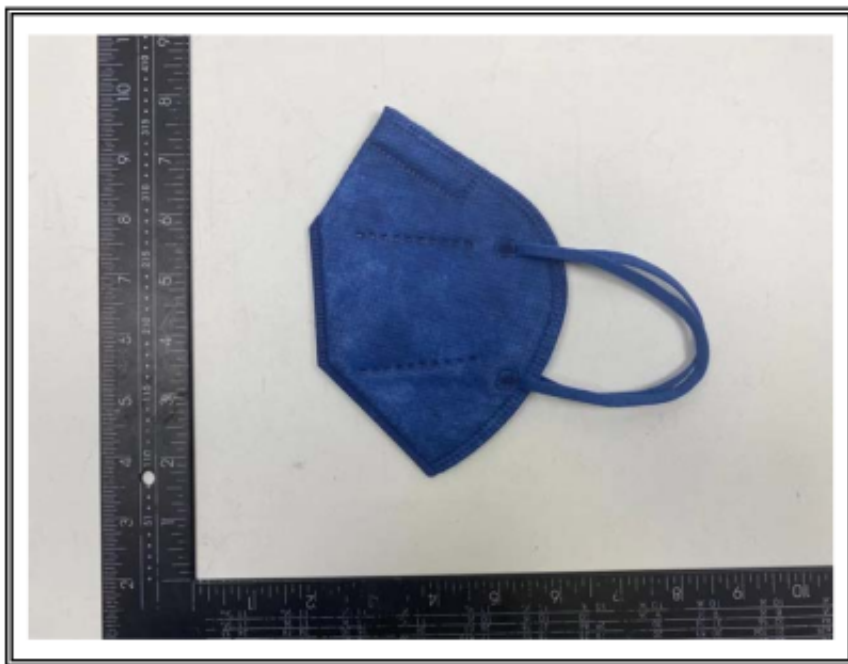
Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: <http://www.gts-lab.com>

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020



Page 14 of 15

This report is only responsible for the tested sample(s) from the client, the testing result(s) is used for scientific research, teaching or internal quality control. Without the writing agreement of the company, the client is not allowed to copy the report in part(entire copy is excepted).

Shanghai Global Testing Services Co., Ltd.

Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China. 201104 China

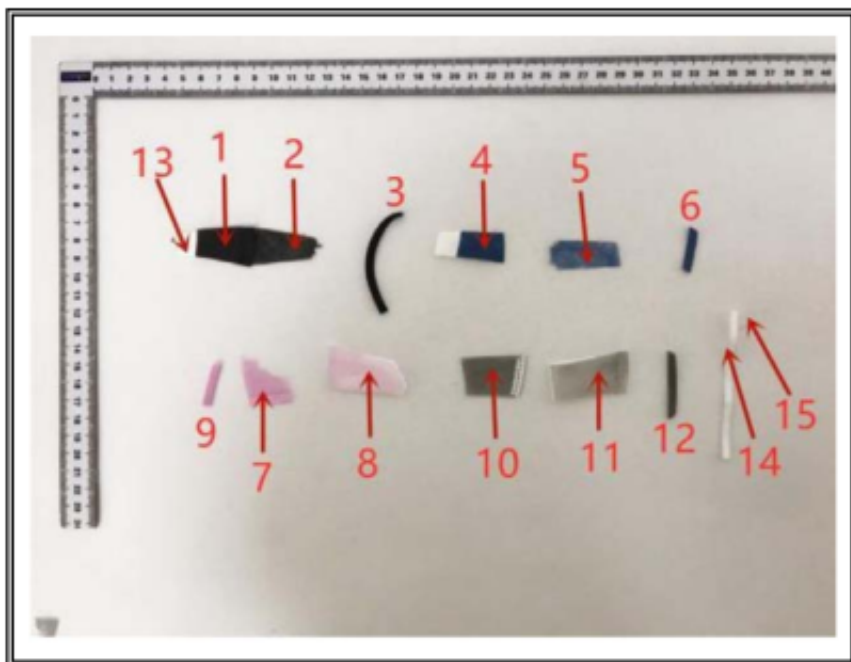
Tel: (86-21) 3363 7866 Fax: (86-21) 3363 7858 E-mail: info@gts-lab.com Web Site: <http://www.gts-lab.com>

Test Report

Report No. THFJ20112528004R1-2EN

Job No.:28004

Date: Dec 04, 2020



End of Report