Test Report 8521713.

Handan Hengyong Protective & Clean Products Co Ltd

UKAS TESTING 0135

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Introduction.

This report has been prepared by O. Refoyo and relates to the activity detailed below:

Job/Registration Details		Client Details
Job number:	**8521713**	Handan Hengyong
Job type:	Testing Samples Submitted	Protective & Clean Products Co Ltd
Start Date:	09/05/16	C-1-901, 9 Yuhua Road
Test type:	Limited Certification Test	Shijiazhuang
Sample ID:	10162847	Hebei
Registration:	**CE 70730**	050000
Scheme:	PPE CE Pt10	China
Protocol:	PP123	
Scheme Mgr:	K Demetriou	

The report has been approved for issue by P Rundle – Senior Engineer

Approved For Issue	
	Issue Date: 29 June 2016

Objectives.

This is an independent Limited Test evaluation to BS EN 149:2001 + A1:2009

Product Scope.

Filtering half mask, respiratory protective device, to protect against particles.

Report Summary.

The samples were received on 06 May 2016 and the testing was started on 09 May 2016.

The samples submitted complied with the requirements of the test work conducted.

Test Samples.

Sample Id	ER Number	Description
1	10162847	FFP3 NR D Valved Filtering Half Mask.

Description of Test Samples.

Sample Description
Handan Hengyong HY8232 Valved Filtering Half Mask - batch 16110.

Test Requirements.

BS EN 149:2001 + A1:2009 Respiratory protective devices - Filtering half masks to protect against particles.

CLAUSE	REQUIREMENTS	ASSESSMENT
7	**Requirements**	-
7.1	General	-
7.2	Nominal values and tolerances	-
7.17	**Clogging**	Conducted
7.17.1	General	-
7.17.2	Breathing resistance	-
7.17.2.1	Valved particle filtering half masks	Pass
7.17.2.2	Valveless particle filtering half masks	N/Ap (1)
7.17.3	Penetration of filter material	Pass
Product Photographs		

(1) Not a design feature of this product

Glossary of Terms.

Pass: Complies – Tested by BSI engineers at BSI laboratories

Fail: Non–compliance – Product does not meet the requirements of this clause.

N/As: Not Assessed

N/Ap: Not Applicable

AR: As Received

TC: Temperature Conditioned

Conditions of Issue.

This Test Report is issued subject to the conditions stated in current issue of 'BSI Terms of Service'. The results contained herein apply only to the particular sample(s) tested and to the specific tests carried out, as detailed in this Test Report. The issuing of this Test Report does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by BSI of any product. No extract, abridgement or abstraction from a Test Report may be published or used to advertise a product without the written consent of BSI, who reserve the absolute right to agree or reject all or any of the details of any items or publicity for which consent may be sought.

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Unless otherwise stated, any results not obtained from testing in a BSI laboratory are outside the scope of our UKAS accreditation.

Test Results.

CLAUSE	REQUIREMENTS	ASSESSMENT
7.1	**General**	
	In all tests all samples shall meet the requirements.	-
7.2	**Nominal values and tolerances**	
	Unless otherwise specified, the values stated in this European Standard are expressed as nominal values. Except for temperature limits, values, which are not stated as maxima or minima, shall be subject to a tolerance of ±5%. Unless otherwise specified, the ambient temperature for testing shall be (16 – 32) °C, and the temperature limits shall be subject to an accuracy of ± 1°C.	-

Test Results (Continued).

CLAUSE	REQUIREMENTS	ASSESSMENT
7.17	**Clogging**	Conducted
7.17.1	General	
	For single shift use devices, the clogging test is an optional test. For re-usable devices the test is mandatory.	
	Devices designed to be resistant to clogging, shown by a slow increase of breathing resistance when loaded with dust, shall be subjected to the treatment described in clause 8.10 of the standard.	-
	The specified breathing resistances shall not be exceeded before the required dust load of 833 mg·h/m^3 is reached.	-
7.17.2	**Breathing Resistance**	
7.17.2.1	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. Test in accordance with clause 8.9 of the standard.	Pass See Tables A & B
7.17.2.2	Valveless particle filtering half masks After clogging the inhalation and exhalation resistances shall not exceed - FFP1: 3 mbar - FFP2: 4 mbar - FFP3: 5 mbar 95 l/min continuous flow. Test in accordance with clause 8.9 of the standard.	N/Ap (1)

(1) Not a design feature of this product

Test Results (Continued).

CLAUSE	REQUIREMENTS	ASSESSMENT

7.17.2 **Breathing resistance (continued)**

Table A: Inhalation resistance - post clogging

Sample No	Pre-test condition	Continuous flow through filter (l/min)	Maximum specified inhalation resistance (mbar)	Actual inhalation resistance (mbar)	Result
1	AR	95	7.00	2.34	Pass
2	TC	95	7.00	2.05	Pass
3	TC	95	7.00	2.43	Pass

Table B: Exhalation resistance - post clogging
measured in five orientations - worst case recorded

Sample No	Pre-test condition	Continuous flow through filter (l/min)	Maximum specified exhalation resistance (mbar)	Actual exhalation resistance (mbar)	Result
1	AR	160	3.00	1.50	Pass
2	TC	160	3.00	1.46	Pass
3	TC	160	3.00	1.65	Pass

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 clause 7.9.2 of the standard, for the penetration test according to EN 13274-7, after the clogging treatment.
Test in accordance with clause 8.11 of the standard using
EN 13274-7:2008

Pass
See Tables C & D

Table C: Sodium chloride penetration - post clogging

Sample No	Pre-test condition	Flowrate through filter (l/min)	Max spec. penetration (%)	Actual penetration (%)	Result
1	AR	95	1.0	0.275209	Pass
2	TC	95	1.0	0.444534	Pass
3	TC	95	1.0	0.128839	Pass

Table D: Paraffin oil penetration - post clogging

Sample No	Pre-test condition	Flowrate through filter (l/min)	Max spec. penetration (%)	Actual penetration (%)	Result
1	AR	95	1.00	0.50	Pass
2	TC	95	1.00	0.85	Pass
3	TC	95	1.00	0.40	Pass

Product photographs.

Model: HY8232

END OF REPORT