

Report Ref: GZI	HT02279529		
Date Received: Apr	· 10, 2020	Date Issued:	May 06, 2020
Company Name:	BYD PRECISION MANUFACTURE	CO., LTD	
Address:	NO.3001 BAOHE ROAD, BAOLONG		
	INDUSTRIAL AREA, LONGGANG		
	SHENZHEN, GUANGDONG, P.R.CHINA		
	, , ,		
Contact Name:	古淑芬		

The Following Sample Was Subm	itted And Identified By/On Behalf Of The Applicant As:
End Uses	: Non-Sterile Medical Face Mask
Ratings	: Type IIR
Sample Name	: Single-Use Surgical Mask
Size	
Colour	: Blue
Standard	: EN 14683:2019+AC:2019
Manufacturer	: BYD PRECISION MANUFACTURE CO., LTD
Band Name	: BYD
Date received/ Test Started	: Apr 10, 2020
Ref	: FE2311

Prepared And Checked By: For Intertek Testing Services Shenzhen Ltd. Guangzhou GDD Branch

Lin Lin General Manager

doris / pennytao



Intertek Testing Services Stienzhen Ltd. Guangzhou Branch

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## Summary of testing:

With reference to following standard:

EN 14683:2019+AC:2019 Medical face masks – Requirements and test methods Type IIR

Materials Used in The Submitted Sample Were Found To Comply With The Type IIR Requirements of EN 14683:2019+AC:2019 with respect to Microbial Cleanliness, Bacterial Filtration Efficiency, Differential Pressure and Splash Resistance Pressure tests.

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Tests Conducted (As Requested By The Applicant)

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## 1 Microbial Cleanliness

As Per EN 14683:2019+AC:2019 Medical Face Masks - Requirements And Test Methods Annex D.

Test Item	<u>Result ( cfu/g )</u> <u>Test component</u>	<u>Requirement</u> <u>( cfu/g )</u>
	(1)	
Total Plate Count (30°C)	1	-
Total Plate Count (20 to 25°C)	1	-
Microbial cleanliness	2	Type IIR: ≤30

cfu = Colony Forming Unit

 $\leq$  = Not More Than

Sample received condition: Sample in closed plastic bag.

Tested Component: (1) Blue Face Mask

2 Bacterial Filtration Efficiency (EN 14683:2019+AC:2019, Clause 5.2.2, Testing Refer To Annex B): Flow rate: 28.3 L/min, Test area: 77 cm<sup>2</sup>, Test bacteria: Staphylococcus aureus ATCC 6538, Inside of the test mask was facing towards the challenge aerosol, The average plate count results of the positive controls: 2.5×10<sup>3</sup> CFU, The average plate count results of the negative controls:<1 CFU.</p>

Tested Sample	<u>Result (%)</u>	Performance Requirement for Medical Face Mask (%)
Specimen (1)	99.1	<u>(70)</u>
Specimen (2)	99.1	Type IIR: ≥ 98
Specimen (3)	99.2	
Specimen (4)	99.1	
Specimen (5)	99.1	

Remark: Test was conducted by external provider.

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Tests Conducted (As Requested By The Applicant)

Differential Pressure (EN 14683:2019+AC:2019 Annex C): 3 Air flow: 8 L/min, Test area diameter 25 mm, Test area: 4.9 cm<sup>2</sup>.

Tested Sample	Result (Pa/cm <sup>2</sup> )	Performance
		Requirement for
		Medical Face Mask
		<u>(Pa/cm<sup>2</sup>)</u>
Specimen (1)	43.4	
Specimen (2)	47.6	Type IIR: < 60
Specimen (3)	40.6	
Specimen (4)	46.3	
Specimen (5)	49.1	
Average	45.4	

Remark: Test was conducted by external provider.

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Page 5 Of 6

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## 4 Splash Resistance Pressure (ISO 22609:2004):

Synthetic Blood Surface Tension: 0.040 N/m, Distance Between Blow Head Front End And Target Area: 300 mm, Artificial Blood Volumes: 2 mL, Test Pressure: 16.0 kPa, Velocity: 550 cm/s, Use A Fixed Target.

Tested Sample	<u>Result</u>	Performance Requirement for Medical Face Mask Type IIR: No penetration at 16.0 kPa
Specimen (1)	None seen	
Specimen (2)	None seen	
Specimen (3)	None seen	
Specimen (4)	None seen	
Specimen (5)	None seen	
Specimen (6)	None seen	
Specimen (7)	None seen	
Specimen (8)	None seen	
Specimen (9)	None seen	
Specimen (10)	None seen	
Specimen (11)	None seen	
Specimen (12)	None seen	
Specimen (13)	None seen	

Remark : Test was conducted by external provider.

End of Report

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