

Test Report

Report No.: WH0315-2020

Product Name:	KN95 face mask
Specification:	1
Applicant:	Crown Name Disposable Hygiene Products Fty., Ltd
Test type:	Consignment Inspection
Report Date:	2020.3.10

National labor products quality supervision and Test Center (Wuhan)

Test report

Report No.:	WH0315-2020		Page 1					
Product Name:	KN95 face mask	Specification:	/					
Applicant:		Crown Name Disposable Hygiene Products Fty., Ltd.						
Address:	C	Chengbei Village, Xinzhou District, Wuhan City, Hubei Province						
Quantity:	36pcs	36pcs Production Date: 2020.3.2						
Brand:	Song Ran	Manufacturer:	Crown Name Disposable Hygiene Products Fty., Ltd.					
Contact:	Jiawei Li	Phone:	18771942333					
Sample Date:	2020.3.3	Test Period:	2020.3.3-2020.3.6					
Sample status:		Sa	ample in good condition					
Test Stardard:	GB2626 20	006 《Respiratory p	rotection Self-priming filter anti-particle respirator》					
Test Items:	General requirement, Appearance Check, Filtering rate, Total leakage rate of disposable masks, Inspiratory resistance, Expiratory resistance, Dead space, Visual field, Headband, flammability, Marks							
Sample Picture:		Sill State of State o						
Test Results:		5 2006 《Respiratory e complied with the	/ protection Self-priming filter anti-particle respirator》, all standard.					

	Tested Item	Standard	Result	Conclusion
		Material directly to face is harmless to skin.	Pass	
		Filtering material is harmless to human body.	Pass	
		All materials have sufficient strength and should not break or deform during normal service life.	Pass	
		Not easy to cause structural damage, and the design, composition and installation of components should be no danger to users.	Pass	
	General Requirement	Adjustable headband to wear and take off, mask firmly fixed on face without obvious compression and tenderness, headband of half mask and full mask should be replaceable.	Adjustable headband to wear and take off, mask firmly fixed on face without obvious compression and	
		As little dead space and large field of view as possible.	Pass	
1		When wearing, the lenses of the full face mask should not affect the vision such as fogging.	/	Pass
		Respiratory protective equipment using replaceable filter elements, inhalation valves, exhalation valves and headbands should be designed for easy replacement, and users can check the air tightness of the mask and face at any time and	/	
		The breathing tube should not restrict the movement of the head or the user's movements, should not affect the tightness of the mask, and should not restrict or block the air flow.	/	
		The structure of the disposable mask should ensure close contact with the face, and it should not deform during its service life.	Pass	

		The surface of the sample should not be damaged, deformed, and other obvious defects.	Sample 1: Sample surfance without damaged, deformed and other defects. Sample 1: Sample surfance without damaged, deformed and other defects.	
		Component materials and structures should be able to withstand normal use conditions and the temperature, humidity, and mechanical shock that may be	Sample 1: Pass Sample 2: Pass	
2	Appearance Check	Adjustable headband and replaceable headband of the replaceable mask.	Sample 1: Adjustable Sample 2: Adjustable	Pass
		Full-face lenses in wearing should not be affected by fogging or other visual effects.	Sample 1: / Sample 2: /	
		After pretreatment by temperature and humidity, the parts should not fall off, be damaged or deformed.	Sample 1: No fall- off, damaged and deformed Sample 2: No fall- off, damaged and deformed	
		After mechanical strength pretreatment, the parts should not fall off, be	Filter element 1: /	
		damaged or deformed.	Filter element 2: /	

Serial No	Tested Item	m Standard		Resul	t	Conclusion	Remarks	
		KN90≥90.0% KN95≥95.0% KN100≥99.97%			Lowest value: 96.7%			
3	Filtering	KP90≥90.0% KP95≥95.0% KP100≥99.97%			Lowest va	lue: /	KN95 Pass	,
	rate		Particle Det 5±5)℃ Hum 10)%		Measured Temp.: 2 Measured Humid 34.5%	ity.: 33.2%-		
			article Dete emp: (25±5)		Measured To	emp.: /		
4	Total leakage rate of disposable masks	Filter parts level	Based on each TIL action as standard (10 person*5 actions), at least 46 TIL in 50 actions.	Based on all TIL as standard , at least total TIL of 8 in 10 persons	TIL of 50 actions	All TIL of 10 persons	KN95 Pass	/
	IIIasks	KN90 or KP90	<13%	<10%	/	/		
		KN95 or KP95	<11%	<8%	TIL of 50 actions<11%	TIL of 9 persons<8%		
		KN100 or KP100	<5%	<2%	1	/		
5	Leakage rate of replaceable	Based on each TIL action as standard (10 person*5 actions), at least 46 TIL in 50 actions less than 5%.		/		/	No such test for disposabl	
	half-face mask	Based on all TIL as standard, at least total TIL of 8 in 10 persons less than 2%.		/			e mask	
6	Leakage rate of full- face mask	Based on each TIL action as standard (10 person*5 actions), at least 46 TIL in 50 actions less than 0.05%.			/		/	No such test for disposabl e mask
7	Inspiratory resistance		iratory resist ple ≤350Pa	tance of	Highest value	e: 76Pa	Pass	/

8	Expiratory resistance	Total Expiratory resistance of each sample ≤250Pa	Hi	ghest value	e: 67Pa	Pass	/
				Condition a)	Condition b)		
			Untreate d sample	/	/		
		The following conditions must not occur in each sample:	Untreate d sample	/	/		No such test as no exhalation valve
9	Air tightness of exhalation valve	reached 500L/min, but the system negative pressure can't reach 1180Pa; b)Time for exhalation valve to normal pressure is less than 20s. Relative humidity on normal	Temp. and humidity pretreat ment sample 1	/	/	/	
			Temp. and humidity pretreat ment sample	/	/		
				d temperat			
		temperature and pressure <75%	Measured pressure: / Measured humidity: /				

	Tested Item		Sta	andard	Result		Conclusion	Remarks
			•	cover of the	Sample	Record		
				subjected to an axial	1	/	1	
		tensile force of 10N for 10 seconds, and there should be no slippage, fracture and			2	/	1	No such
4.0	Exhalation	deforma		siippage, iraciaie ana	3	/	1,	test as no
10	valve cover	The bre	athing valve	cover of the	Sample	Record	/	exhalation
		•		s subjected to an axial	1	/		valve
				for 10 seconds, and slippage, fracture and	2	/	1	
		deforma		siippage, iracture and	3	/	1	
11	Dead space	When e	xpressed as dioxide in th	s the volume fraction of e inhaled air, the e results ≤1%	Average \	/alue: 0.4%	Pass	/
		Tamanar	otuno. (10	22)°C	Measured		1	
		remper	ature: (16 -	32) (temperatu			
		Half-fac	Half-face mask Visual field below≥60 ⁰		64 ⁰			
	Visual field		Big-eye	All view≥70%	/		Pass	
12		face	window	Binocular visual field≥ 80%				/
			Small-eye	All view≥70%	/			
			window	Binocular visual field≥ 20%		/		
		Each headband, buckle and other adjustment parts of the disposable mask			Untreate d sample	No slippage or fracture		
			should not slip or break when it is			No		
		subjecte	subjected to a tensile force of 10N for 10s.		ture and humidity	slippage		
		Fook ho				or fracture	1	
13	Headband	adjustm face ma	Each headband, buckle and other adjustment parts of the replaceable half-face mask should not slip or break when it is subjected to a tensile force of 50N for 10s.			/	Pass	/
		Each headband, buckle and other adjustment parts of the full-face mask should not slip or break when it is subjected to a tensile force of 150N for 10s.			/			

	D.: WH0315-202		Do	cult	Canalysian	Page 5
Serial No.	Tested Item	Standard		sult	Conclusion	Remarks
	Connection and	Under the specified test conditions, all the connections and connecting parts between the replaceable filter element and the mask should not slip, break and deform when subjected to an axial tensile force of 50N for 10 seconds.		/		No such test for disposabl e mask
14	14 Connection and connected parts	Under the specified test conditions, all connections and connection parts between the replaceable filter element and the mask, and between the breathing tube and the filter element and the mask, should not slip ,break or deform when subjected to an axial tensile force of 250N for 10s.		/	/	
			Sample	Record		
		After each sample is impacted by the steel ball, the lens should not be broken or cracked.	Sample 1	/		
15 Lens			Sample 2	/	/	No such
			Sample 3	/		
		pronon or orachear	Sample 4	/		
	Lene		Sample 5	/		test for
	LONS	The sample impacted by the steel ball is tested by air tightness method, the negative pressure drop in each sample within 60s should not be greater than 100Pa.	Sample	Record		disposabl
			Sample 1	/		e mask
			Sample 2	/		
			Sample 3	/		
			Sample 4	/		
			Sample 5	/		
16	Air tightness	The negative pressure drop in each sample within 60s should not be greater than 100Pa.	,	/	/	No such test for disposabl e mask
			Sample	Record		
17		Parts evaceed to the flowe shall not	Untreated sample 1	4s		
	Flammability	Parts exposed to the flame shall not burn after being removed from the flame. If burning, the duration does not exceed 5s	Untreated sample 2	3s	Pass	/
			Untreated sample 3	4s		
			Untreated sample 4	4s		

Report No.: WH0315-2020 Page 6

	Tested Item		Standard		Result	Conclusion	Page 6
Serial No.	rested item		Names, tradem	arks or other	Nesuit	Conclusion	Remarks
			marks that identify		Song ran		
			manufacturer o	•	J		
		On product	Model and size	(if applicable)	ZSLP-001		
		product	Standard numb filter element m filter level	•	GB2626-2006		
			Names, tradem marks that iden		Song ran Protective mask		
			Mask type		Disposable mask		
			Model and size	(if applicable)	ZSLP-001 (ear-loop)		
18	Marks		Standard number and year, filter element marked with filter level		GB2626-2006	Pass	/
		0	Product License Number		/		
		On inner package	Production date or Batch No.		2020.3.2		
			Storage life (at least in year)		2 years		
			"See information provided by supplier" mark		"See information provided by supplier" mark available		
			Storage condition provided by supplier (at least Temp. and humidity)		Strorage Temp20℃ -38℃ Strorage Humidity ≤ 80%		
		N	lumber	Ma	chine Name	Verification	n period
		HJ	I-SB131	Filtration effic	iency detection device	2019.8.28-2020.8.27	
		HJ	I-SB132	Leakage detection device		2019.8.28-2	2020.8.27
			I-SB120	Breath resistance tester		2019.8.28-2020.8.27	
		HJ	I-SB160		r permeability tester	2019.6.2-2	2020.6.1
Main test machines		HJ-SB021		BD-102 Horizontal Freezer (Temperature Controller)		2019.6.2-2020.6.1	
			I-SB119		Aging test box	2019.6.2-2	2020.6.1
		HJ	I-SB118	XMT101 I	Flammability tester	2019.6.2-2	2020.6.1
		HJ	I-SB202	HT-2402 Computer Servo Control Material Testing Machine		2019.6.19-2	2020.6.18

Inspection start and end date: 2020.3.3-2020.3.6