



SUBJECT Chemical Test

TEST LOCATION TÜV SÜD China
TÜV SÜD Products Testing (Shanghai) Co., Ltd.
B-3/4, No.1999 Du Hui Road, Minhang District
Shanghai 201108, P.R. China

CLIENT NAME Shandong Intco Medical Products Co., Ltd

CLIENT ADDRESS No.9888 Qiwang Road, Naoshan Industry Park, Qingzhou, Shandong, China

TEST PERIOD 31-May-2021~07-Jun-2021

RESULT SUMMARY

1. The tested items complied with German Food & Feed Acts of September 1, 2005 (LFGB), Section 30 and 31.	
- Overall migration test	PASS
- Color release	PASS
- Extractable formaldehyde	PASS
- Total lead and zinc content	PASS
- Sensory test	PASS
2. The tested items complied with AfPS GS 2019: 01 PAK	
- Polycyclic Aromatic Hydrocarbons (PAHs) content(Category 1)	PASS
3. As per client's request	
- Total Cadmium content	PASS

Prepared By

Nance Gao

(Nance Gao)
Report Drafter

Authorized By

Leo Liu

(Leo Liu)
Authorized Signatory

Note: (1) General Terms & Conditions as mentioned overleaf. (2) The results relate only to the items tested.(3) The test report shall not be reproduced except in full without the written approval of the laboratory.(4) Without the agreement of the laboratory, the client is not authorized to use the test results for unapproved propaganda.

Chemical/Microbiology Laboratory:
TÜV SÜD Products Testing (Shanghai) Co., Ltd
B-3/4, No.1999 Du Hui Road, Minhang District
Shanghai
201108
P.R. China

Phone : +86 (21) 6037 6375
Fax : +86 (21) 6037 6345
Email: food.chem@tuv-sud.cn
Webpage: www.tuv-sud.cn

Regional Head Office:
TÜV SÜD Certification and Testing
(China) Co., Ltd.
No.151 Heng Tong Road Shanghai
200 070 P.R.China



RECEIPT DATE / TEST DATE

31-May-2021/ 31-May-2021

THE FOLLOWING SAMPLE(S) WAS/WERE SUBMITTED

BY/ ON BEHALF OF THE CLIENTS AS

Sample Name: Disposable Nitrile Gloves

Sample Specification: /

Batch No./Date: /

Manufactory: Shandong Intco Medical Products Co., Ltd

SAMPLE NO.	DESCRIPTION	PHOTOGRAPH
721664284	Blue glove	

TEST RESULT(S)

Note: The migration results in this report were tested and expressed based on single use articles.

1. Overall Migration Test

- In accordance with BFR Recommendations XXI
- Test method: With reference to EN 1186: Part 4 (Test methods for overall migration into olive oil by cell), EN 1186: Part 5 (Test methods for overall migration into aqueous food stimulants by cell) and BFR Recommendations XXI
- Migration ratio (S/V): 10dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/dm ²]	Maximum Permissible Limit [mg/dm ²]
3% Acetic acid	40°C for 0.5 hours	3.15	10
10% Ethanol	40°C for 2 hours	0.950	10
Olive oil	40°C for 2 hours	<0.500	10

2. Color release

- Test method: With reference to Kunststoffe im Lebensmittelverkehr Book II, Teil B II, IX

Simulant(s) Used	Test Condition	Result(s)	Permissible Limit
10% Ethanol	50°C for 5 hours	No bleeding	No bleeding
2% Acetic acid	50°C for 5 hours	No bleeding	No bleeding
Peanut oil	50°C for 5 hours	No bleeding	No bleeding
Water	50°C for 5 hours	No bleeding	No bleeding

Note: 1. No bleeding denotes no difference was found between blank and sample
2. Bleeding denotes staining was found from sample



3. Extractable formaldehyde

- Test method: For compliance with the Recommendation of the BfR "Kunststoffe im Lebensmittelverkehr" Part XXI. Commodities based on Natural and Synthetic Rubber
- With reference to Section 2.7.1 of methods for the "Testing of commodities made of rubber"
- Test condition: 3% Acetic acid, 40°C for 0.5 hours
- Migration ratio (S/V): 6dm²/L

Test Item(s)	Result(s) [µg/ml]	Maximum Permissible Limit [µg/ml]
Extractable Formaldehyde	<0.5	3

4. Total lead and zinc content

- Test method: Acid digestion, then followed by ICP-OES

Test Item(s)	Result(s) [%]	Maximum Permissible Limit [%]
Lead content	<0.001	0.003
Zinc content	0.250	3.0

5. Sensory test

- Test method: With reference to DIN 10955.
- The submitted sample was simulated in distilled water at 40°C for 2 hours. After this treatment treated water was examined by panels with regard to any divergence in smell and taste.

Sample(s)	Testing Parameter	Grading result(s)	Recommended level
721664284	Transfer of taste	0	<3
	Transfer of smell	0	<3

Note: 1. Available grading are listed as follow:

- Grading 0: No perceptible taste/smell deviation
- 1: Just perceptible taste/smell deviation
- 2: Weak taste/smell deviation
- 3: Clear taste/smell deviation
- 4: Strong taste/smell deviation

6. Polycyclic Aromatic Hydrocarbons (PAHs) content

- Test method: In accordance with AfPS GS 2019: 01 PAK

Compounds	Results [mg/kg]	Detection Limit [mg/kg]
Chrysene	ND	0.01
Benzo[a]anthracene	ND	0.01
Benzo[b]fluoranthene	ND	0.01
Benzo[j]fluoranthene	ND	0.01
Benzo[k]fluoranthene	ND	0.01
Benzo[e]pyrene	ND	0.01
Benzo[a]pyrene	ND	0.01
Indeno[1,2,3-cd]pyrene	ND	0.01
Dibenzo[ah]anthracene	ND	0.01
Benzo[ghi]perylene	ND	0.01
Naphthalene	0.0585	0.01
Phenanthrene	0.0619	0.01



Anthracene	ND	0.01
Fluoranthene	0.0109	0.01
Pyrene	0.0321	0.01
Sum of Phenanthrene, Pyrene, Anthracene and Fluoranthene	0.105	--
Group PAH	0.163	--
Category as in AfPS GS 2019: 01 PAK	Category 1	--

Note: 1. ND denotes not detected, less than Reporting Limit
Limits and Categories for PAH in product according to AfPS GS 2019: 01 PAK

Limits and Categories

Parameter [mg/kg]	Category 1	Category 2		Category 3	
	Materials intended to be put in the mouth, or materials of toys from 2009/48/EC for children aged < 3 years with intended skin contact (contact >30s)	Materials not covered by category 1, with foreseeable skin contact for longer than 30 s (long-term skin contact) or repeated short term skin contact*		Materials not covered by category 1 or 2 with foreseeable skin contact up to 30 s (short term skin contact)	
		Products for use by children aged < 14 years (active or passive direct contact)	All other products acc to ProdSG	Products for use by children aged < 14 years (active or passive direct contact)	All other products acc to ProdSG
Benzo[a]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[e]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[a]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[b]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[j]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[k]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Chrysene	<0.2	<0.2	<0.5	<0.5	<1
Dibenzo[a,h]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[ghi]perylene	<0.2	<0.2	<0.5	<0.5	<1
Indeno[1,2,3-cd]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Phenanthrene, Anthracene, Fluoranthene and Pyrene	<1 sum	<5 sum	<10 sum	<20 sum	<50 Sum
Naphthalene	<1	<2		<10	
Sum 15 PAH	<1	<5	<10	<20	<50

* Definition "short-term repetitive contact with the human skin" from REACH Annex XVII No. 50 amendment (COMMISSION REGULATION (EU) No 1272/2013)

7. Total Cadmium content

- Test method: Sample digested, analysed by ICP-MS

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit* [mg/kg]
Total Cadmium Content	<2	2



Note: 1. * denotes Maximum Permissible Limit was provided by client

Note: This report is for internal use only such as internal scientific research ,education, quality control, product R&D

-END OF THE TEST REPORT-



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