



**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** SUPREMINOX, S.A.

**CLIENT ADDRESS** Avenida del progres No.93-96- Pol.industrial ELS GARROFERS VILASSAR DE  
MAR-08340 BARCELONA SPAIN

**TEST PERIOD** 11-Jul-2022~18-Jul-2022

**RESULT SUMMARY**

With reference to European COMMISSION REGULATION (EU) No 2020/1245,  
(EU) No 10/2011 and its amendments on plastic materials and articles intended to  
come into contact with food

- |  |             |
|--|-------------|
| - Overall migration test                             | <b>PASS</b> |
| - Specific Migration of Total Primary Aromatic Amine | <b>PASS</b> |
| - Specific Migration of Bisphenol A                  | <b>PASS</b> |
| - Extractable Heavy Metal                            | <b>PASS</b> |

Prepared By

( Judy Hu )  
Report Drafter

Authorized By

( Leo )  
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.




**RECEIPT DATE / TEST DATE**

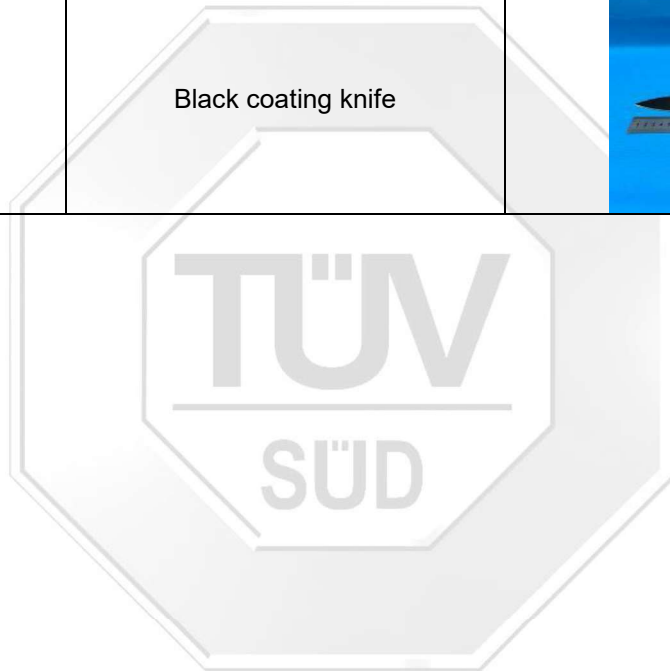
11-Jul-2022/ 11-Jul-2022

**THE FOLLOWING SAMPLE(S) WAS/WERE SUBMITTED**

**BY/ ON BEHALF OF THE CLIENTS AS**

Sample Name: CUCHILLO BLACK SERIES KITCHEN KNIFE  
Sample Specification: REF1062  
Batch No./Date: /  
Manufacturer: /

SAMPLE NO.	DESCRIPTION	PHOTOGRAPH
721673214	Black coating knife	



## TEST RESULT(S)

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

### 1. Overall Migration Test

- Test method: With reference EN 1186-2:2002/ EN 1186-3:2002/ EN 1186-14:2002
- Migration ratio (S/V): 10dm<sup>2</sup>/L

Simulant(s) Used	Test Condition	Result(s) [mg/dm <sup>2</sup> ]	Maximum* Permissible Limit [mg/dm <sup>2</sup> ]
10% Ethanol	70°C for 2 hours	<3.00	10
3% Acetic acid	70°C for 2 hours	3.43	10
95% Ethanol	60°C for 2 hours	<3.00	10
Iso-octane	40°C for 0.5 hour	<3.00	10

### 2. Special Migration of Total Primary Aromatic Amine

- Test method: With reference to EN13130-1:2004&BfR Recommendation LI, followed by Kunststoffe im Lebensmittelverkehr, Book 2, Teil B II,XXI
- Test Condition: 3% Acetic acid, 70°C for 2 hours
- Migration ratio (S/V): 6dm<sup>2</sup>/L

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]
Total Primary Aromatic Amine	<0.01	0.01

### 3. Specific Migration of Bisphenol A

- Test method: With reference to CEN/TS 13130-13:2005
- Test condition: 3% Acetic acid, 70°C for 2 hours
- Migration ratio (S/V): 6dm<sup>2</sup>/L

Test Item(s)	Result(s) [mg/kg]			Maximum Permissible Limit [mg/kg]
	1 <sup>st</sup> migration	2 <sup>nd</sup> migration	3 <sup>rd</sup> migration	
Bisphenol A	<0.05	<0.05	<0.05	0.05

Stability: Comply



4. Extractable Heavy Metal

- Test method: The sample was simulated in 0.5% Citric acid at 70°C for 2 hours. The heavy metal content of extracting solution was then analysed using by ICP-MS.

Test Item(s)	Result(s) [mg/kg]		Maximum Permissible Limit* [mg/kg]	
	3 <sup>rd</sup> migration	1 <sup>st</sup> + 2 <sup>nd</sup> migration	3 <sup>rd</sup> migration	1 <sup>st</sup> + 2 <sup>nd</sup> migration
Silver	<0.01	<0.02	0.08	0.56
Aluminium	<0.01	<0.02	5	35
Cobalt	<0.01	<0.02	0.02	0.14
Chromium	<0.010	<0.020	0.250	1.75
Copper	<0.01	<0.02	4	28
Iron	<1.0	<2.0	40	280
Magnesium	<0.01	<0.02	--	--
Manganese	<0.10	<0.20	1.8	12.6
Molybdenum	<0.01	<0.02	0.12	0.84
Nickel	<0.01	<0.02	0.14	0.98
Tin	<1.0	<2.0	100	700
Titanium	<0.01	<0.02	--	--
Vanadium	<0.001	<0.002	0.01	0.07
Zinc	<0.10	<0.20	5	35
Arsenic	<0.001	<0.002	0.002	0.014
Barium	0.0105	0.253	1.2	8.4
Beryllium	<0.001	<0.002	0.01	0.07
Cadmium	<0.001	<0.002	0.005	0.035
Mercury	<0.001	<0.002	0.003	0.021
Lithium	<0.010	<0.020	0.048	0.336
Lead	<0.001	<0.002	0.010	0.07
Antimony	<0.01	<0.02	0.04	0.28
Thallium	<0.0001	<0.0002	0.0001	0.0007

Note: 1. \* denotes specification was quoted from Technical guide on metal and alloys used in food contact materials



Note: The samples pictured below have been confirmed by the customer to be of the same material as the sample tested.



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

-END OF THE TEST REPORT-



SHAI) CO