

**Test Report** Number: GZHH0031422103

Date:

Apr 03, 2019

Result

Pass

BAREBONES SYSTEMS, LLC. Applicant:

1215 EAST WILMINGTON AVENUE -STE.

140 SALT LAKE CITY, UT 84106

Sample Description:

Five (5) pieces of submitted sample said to be :

Item Name **FOLDING PICNIC KNIFE** 

50 Cr15Mov Steel/Colour Wood/Stainless Steel Material Name

Country of Origin



Tests conducted:

As requested by the applicant, refer to attached page(s) for details.

Conclusion:

**Tested Sample** Tested component(s) of

EU Technical Guide Council of Europe Resolution submitted samples CM/Res(2013)9 on metals and alloys Used in Food

Contact Materials and Articles on specific migration of

heavy metal

**Standard** 

Authorized by:

For Intertek Testing Services Shenzhen Ltd.

Guangzhou Branch, Hardlines

Ben N.L. Lin General Manager





Tel +8620 8213 9688 Fax +8620 3205 3537 intertek.com.cn intertek.com





**Test Report** Number: GZHH0031422103

## **Tests Conducted**

## 1 Release Testing on Metals and Alloys Used in Food Contact Materials and Articles

With reference to EU Technical Guide "Council of Europe Resolution CM/Res(2013)9 on metals and alloys Used in Food Contact Materials and Articles". Migration test was carried out and heavy metal content was determined by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES) and Inductively Coupled Plasma Mass Spectrometer (ICP-MS) with reference to ISO 11885:2007 and ISO 17294-2:2003 respectively.

**Test Condition:** 

Temperature: 70 °C Time: 2 hours

Test Result:

Food simulant: Citric acid (5 g/L)

Tested component (1):									
<u>Elements</u>	Result 1 <sup>st</sup> test (mg/kg)	Result 2 <sup>nd</sup> test (mg/kg)	Result 1 <sup>st</sup> test+Result 2 <sup>nd</sup> test (mg/kg)	Result 3 <sup>rd</sup> test (mg/kg)	Reporting Limit (mg/kg)	7*Limit (mg/kg)	<u>Limit</u> (mg/kg)		
Silver (Ag)	ND	ND	ND	ND	0.05	0.56	0.08		
Aluminium (AI)	ND	ND	ND	ND	1	35	5		
Chromium (Cr)	0.10	0.06	0.16	0.02	0.02	1.75	0.250		
Cobalt (Co)	ND	ND	ND	ND	0.01	0.14	0.02		
Copper (Cu)	ND	ND	ND	ND	0.5	28	4		
Iron (Fe)	5	3	8	ND	1	280	40		
Manganese (Mn)	ND	ND	ND	ND	0.1	12.6	1.8		
Molybdenum(Mo)	ND	ND	ND	ND	0.02	0.84	0.12		
Nickel (Ni)	ND	ND	ND	ND	0.1	0.98	0.14		
Tin (Sn)	ND	ND	ND	ND	10	700	100		
Vanadium (V)	ND	ND	ND	ND	0.005	0.07	0.01		
Zinc (Zn)	ND	ND	ND	ND	1	35	5		
Antimony (Sb)	ND	ND	ND	ND	0.01	0.28	0.04		
Arsenic (As)	ND	ND	ND	ND	0.001	0.014	0.002		
Barium (Ba)	ND	ND	ND	ND	0.1	8.4	1.2		
Beryllium (Be)	ND	ND	ND	ND	0.01	0.07	0.01		
Cadmium (Cd)	ND	ND	ND	ND	0.001	0.035	0.005		
Lead (Pb)	ND	ND	ND	ND	0.005	0.070	0.010		
Lithium (Li)	ND	ND	ND	ND	0.010	0.336	0.048		
Mercury (Hg)	ND	ND	ND	ND	0.003	0.021	0.003		
Thallium (TI)	ND	ND	ND	ND	0.0001	0.0007	0.0001		
Magnesium(Mg)	ND	ND	ND	ND	1	-	-		
Titanium(Ti)	ND	ND	ND	ND	1		_		









**Test Report** Number: GZHH0031422103

## **Tests Conducted**

Tested component (2):										
rested componen	` '	- 4	Result 1 <sup>st</sup>							
	Result 1st	Result 2 <sup>nd</sup>	test+Result	Result 3 <sup>rd</sup>	Reporting	7*Limit	<u>Limit</u>			
<u>Elements</u>	<u>test</u>	<u>test</u>	2 <sup>nd</sup> test	<u>test</u>	<u>Limit</u>	(mg/kg)	(mg/kg)			
	(mg/kg)	<u>(mg/kg)</u>	(mg/kg)	<u>(mg/kg)</u>	(mg/kg)	(mg/kg)	(mg/kg)			
Silver (Ag)	ND	ND	ND	ND	0.05	0.56	0.08			
Aluminium (AI)	ND	ND	ND	ND	1	35	5			
Chromium (Cr)	1.28	0.22	1.50	0.09	0.02	1.75	0.250			
Cobalt (Co)	ND	ND	ND	ND	0.01	0.14	0.02			
Copper (Cu)	ND	ND	ND	ND	0.5	28	4			
Iron (Fe)	33	5	38	1	1	280	40			
Manganese (Mn)	ND	ND	ND	ND	0.1	12.6	1.8			
Molybdenum(Mo)	ND	ND	ND	ND	0.02	0.84	0.12			
Nickel (Ni)	ND	ND	ND	ND	0.1	0.98	0.14			
Tin (Sn)	ND	ND	ND	ND	10	700	100			
Vanadium (V)	ND	ND	ND	ND	0.005	0.07	0.01			
Zinc (Zn)	ND	ND	ND	ND	1	35	5			
Antimony (Sb)	ND	ND	ND	ND	0.01	0.28	0.04			
Arsenic (As)	ND	ND	ND	ND	0.001	0.014	0.002			
Barium (Ba)	ND	ND	ND	ND	0.1	8.4	1.2			
Beryllium (Be)	ND	ND	ND	ND	0.01	0.07	0.01			
Cadmium (Cd)	ND	ND	ND	ND	0.001	0.035	0.005			
Lead (Pb)	ND	ND	ND	ND	0.005	0.070	0.010			
Lithium (Li)	ND	ND	ND	ND	0.010	0.336	0.048			
Mercury (Hg)	ND	ND	ND	ND	0.003	0.021	0.003			
Thallium (TI)	ND	ND	ND	ND	0.0001	0.0007	0.0001			
Magnesium(Mg)	ND	ND	ND	ND	1	-	-			
Titanium(Ti)	ND	ND	ND	ND	1	-	-			

ND = Not detected(less than reporting limit)

Remark: The submitted sample is a repeated use article. The migration test was carried out three times on the same article. The sum of the results of the first and second tests should not exceed seven times the limit (Result 1<sup>st</sup> test + Result 2<sup>nd</sup> test < 7 \* limit) and the Result 3<sup>rd</sup> test shouldn't exceed the limit.

## Tested component(s):

Silver color 50Cr15Mov steel metal (blade).

(2)Silver color stainless steel metal (holder of blade, axle).

Date Sample Received: Mar 01, 2019

Testing Period: Mar 01, 2019 to Mar 30, 2019

End of report

This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct. This report shall not be reproduced unless with prior written approval from Intertek Testing Services Shenzhen Limited, Guangzhou Branch.



intertek.com

