



**TECHNICAL REPORT**

**Report # 37538**

**Tierracast, Inc  
3177 Guerneville Rd  
Santa Rosa, CA 95401**

**December 26, 2007**

<b>Requested By:</b>	Steve Tierra
<b>Authorization Received:</b>	December 3, 2007
<b>Country of Origin:</b>	USA
<b>Sample Name:</b>	4mm Beaded Heishi Silver Plate
<b>Model/Style #:</b>	93-0408
<b>Supplier/Manufacturer:</b>	Tierracast, Inc
<b>Sample Received:</b>	November 30, 2007
<b>Number of Samples:</b>	3
<b>Labeled Age Group:</b>	Not Provided
<b>Age Grading to be Applied:</b>	Not Provided
<b>Condition Received:</b>	Good
<b>Testing Completed:</b>	December 12, 2007

**SUMMARY:**

**Chemical Analysis:**

EN71 Part III, Migration of Certain Elements

**RESULTS:**

DOES COMPLY

**Reviewed by:**

Caroline Dechard  
Jr. Client Manager  
MWW

**Chemical:** Migration of Certain Elements (EN71 Part III:1994)  
**Coating paints, Varnishes, Lacquers, Printing inks, Plastic, Paper, Wood, Crayons, Modeling Clay, Finger Paints, Glass / Ceramics**

**Procedure:**

A test portion is mixed with 50 times its mass of an aqueous solution of 0.07N HCl. Check pH if greater than 1.5 adjust to a pH 1.5 or less with 2.0N HCl. Protect from light. Agitate the mixture for 1 hour at a temperature of  $37 \pm 2^{\circ}\text{C}$ . Allow the mixture to stand for 1 hour at  $37^{\circ}\pm 2^{\circ}\text{C}$ . Centrifuge or filter the mixture and examine the resulting solution to determine the presence and quantity of the appropriate elements specified below. Analysis is performed by using *ICAP Emission Spectroscopy*.

**Sample ID:**           **4mm Beaded Heishi Silver Plate, Style # 93-0408**

**Sample Utilized:**   **Dry Weight of Submitted Coating**

**Results:**

		<i>Results Soluble mg/kg</i>
		Sample
		1
<b>Element</b>	<b>Max Limit mg/kg</b>	<b>4mm Beaded Heishi Silver Plate, Style # 93-0408</b>
Antimony	60	<5.0
Arsenic	25	<2.5
Barium	1000	<5.0
Cadmium	75	<5.0
Chromium	60	<5.0
Lead	90	<5.0
Mercury	60	<5.0
Selenium	500	<5.0

**Conclusion:** When tested as specified, the submitted sample **does comply** with the requirements of *EN71 Part III:1994*.





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**December 26, 2007**

**Requested By:** Steve Tierra  
**Authorization Received:** December 3, 2007  
**Country of Origin:** USA  
**Sample Name:** Butterfly Bead Gold Plate  
**Model/Style #:** 94-5650  
**Supplier/Manufacturer:** Tierracast, Inc  
**Sample Received:** November 30, 2007  
**Number of Samples:** 3  
**Labeled Age Group:** Not Provided  
**Age Grading to be Applied:** Not Provided  
**Condition Received:** Good  
**Testing Completed:** December 12, 2007

**SUMMARY:**

**Chemical Analysis:**

EN71 Part III, Migration of Certain Elements

**RESULTS:**

DOES COMPLY

**Reviewed by:**

Caroline Dechard  
Jr. Client Manager  
MWW

**Chemical:** Migration of Certain Elements (EN71 Part III:1994)  
**Coating paints, Varnishes, Lacquers, Printing inks, Plastic, Paper, Wood, Crayons, Modeling Clay, Finger Paints, Glass / Ceramics**

**Procedure:**

A test portion is mixed with 50 times its mass of an aqueous solution of 0.07N HCl. Check pH if greater than 1.5 adjust to a pH 1.5 or less with 2.0N HCl. Protect from light. Agitate the mixture for 1 hour at a temperature of  $37 \pm 2^{\circ}\text{C}$ . Allow the mixture to stand for 1 hour at  $37^{\circ}\pm 2^{\circ}\text{C}$ . Centrifuge or filter the mixture and examine the resulting solution to determine the presence and quantity of the appropriate elements specified below. Analysis is performed by using *ICAP Emission Spectroscopy*.

**Sample ID:** Butterfly Bead Gold Plate, Style # 94-5650

**Sample Utilized:** Complete Product Digested

**Results:**

		<i>Results Soluble mg/kg</i>
		Sample
		1
<b>Element</b>	<b>Max Limit mg/kg</b>	<b>Butterfly Bead Gold Plate</b>
Antimony	60	6.7
Arsenic	25	<2.5
Barium	1000	<5.0
Cadmium	75	<5.0
Chromium	60	<5.0
Lead	90	<5.0
Mercury	60	<5.0
Selenium	500	<5.0

**Conclusion:** When tested as specified, the submitted sample **does comply** with the requirements of *EN71 Part III:1994*.

