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CERTIFICATION BODY No. 3065

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CERTIFICATION PROTOCOL

No. : CA – 3/2014

Applicant : CRYSTALITE Bohemia s.r.o.
Zámecká 730
582 91 Světlá nad Sázavou, Czech Republic
Reg.No. : 26174723

Product name : **Kitchenware and beverage glass – mechanically blow-pressed beverage crystal glass crystalin decorated with gold and platinum on the top edge and with enamel under mouth edge. Pressed kitchenware and utility glass**

Producer : **CRYSTALITE Bohemia s.r.o.**
Zámecká 730, 582 91 Světlá nad Sázavou
plant Světlá nad Sázavou
plant Strání - Květná

Date of issue: 2014-04-01

Protocol was performed by: Lenka Stránská

Conformity assessment performed by : Lenka Stránská

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1. INTRODUCTION

Kitchenware and beverage glass – mechanically blow-pressed beverage crystal glass crystalin decorated with gold and platinum on the top edge and with enamel under mouth edge. Pressed kitchenware and utility glass is a product used in households or in public consume in contact with consumables.

2. FOUNDATIONS FOR WORKING-OUT OF CERTIFICATION PROTOCOL

- Application for certification No. 3/2014 from 2014-02-06
- Test report No. 29/2014 from 2014-03-14 issued by Laboratory for glass and building products testing, accredited testing laboratory (AZL) No.1139, IKATES, s.r.o. Teplice, Test report No. 14/0164 from 2014-03-18, Test report No. 14/0165 from 2014-03-08 - issued by Testing laboratory IKATES, s.r.o. Teplice, AZL 1139.2 (analytic laboratory)
- Audit report of technical and organizational conditions in field of production quality assurance from 2014-02-14.
- Technical documentation of the producer

3. NORMATIVE REFERENCES

ČSN 70 8005 : Utility glass. General provision.

DIN 51 032 : Ceramic, glass, glass ceramics, enamel. Limit values for leach of lead and cadmium from consumer articles.

ISO 7086-2 : Glass hollow ware in contact with food – Release of lead and cadmium – Part 2: Permissible limits

BS 6748 : Specification for limits of metal release from ceramic ware, glassware, glass ceramic ware and vitreous enamel ware

GOST 30407: Glass tableware and decorative articles

Ordinance of Ministry of Health (MH) No. 38/2001 Coll., as amended by further legal acts, annex No. 9, Section 1

4. OBSERVED PROPERTIES

According to ČSN 70 8005 : - inner stress

- water resistance

- leach from product surface (content of lead and cadmium, health harmless)

According to ČSN 70 8005, DIN 51 032, ISO 7086-2, BS 6748, GOST 30407, Ordinance of MH No. 38/2001 Coll., as amended by further legal acts - leach from product surface (content of lead and cadmium, health harmless)

5. TEST SAMPLES DATA

Following specimens were taken to the testing :

- blow-pressed beverage glass from crystalin

18 pcs Natalia Maxima 590 ml No. 1-18

4 pcs Klaudie 230 ml No. 1A-4A

- pressed household utility glass

2 pcs of vases „Tukana Miranda“ 25 cm No. 1B-2B

- dice, sampling 2014-02-07

Samples were renumbered for elaboration of certificate protocol



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6. TEST RESULTS AND EVALUATION

6.1 Appearance (according to ČSN 70 8005)

Measured mean values of maximum specific track difference.

Sample marking	No.	Mean values of maximum specific track difference (inner stress) X [nm/cm]	
		mouth edge of sample	body, bottom of sample
Natalia Maxima 590 ml	1	< 50	12
	2	< 50	12
	3	< 50	13
	4	< 50	12
	5	< 50	21
	6	< 50	20
	7	< 50	12
	8	< 50	21
	9	< 50	13
	10	< 50	21
	11	< 50	13
	12	< 50	13
	13	< 45	13
	14	< 50	13
	15	< 50	12
	16	< 50	14
	17	< 50	12
	18	< 50	12
Vase Tukana Miranda	1B	-	33
	2B	-	34

Notes: Measurement uncertainty $u_{(X)} = 20$ nm/cm for measuring in mouth edge or < 10 nm/cm at measuring of inner stress in body or on the bottom of glass is extended (total) uncertainty based on standard deviation 0,05 (unit) multiplied by coefficient $k=2$, which ensures confidence interval approximately 95%.

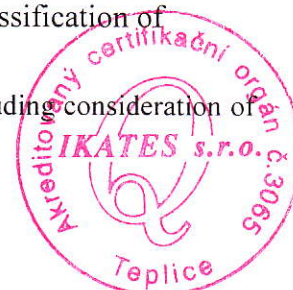
It agrees with requirements of the standard ČSN 70 8005, paragraph 4.1.4.

6.2 Water resistance (according to ČSN 70 8005)

Dice tested, sampling 2014-02-07

Average of consumption of hydrochloric acid dilution $c(\text{HCl}) = 0,01$ mol/l per 1 g of crushed glass and uncertainty expression : $0,82 \text{ ml} \pm 0,02 \text{ ml}$ – water resistance classification of crushed glass : **HGB 3**

It agrees with requirements of the standard ČSN 70 8005, paragraph 4.1.1, including consideration of measurement uncertainty.



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6.3. Leach from product surface (content of lead and cadmium,harmless to health)
(according to ČSN 70 8005, DIN 51 032, ISO 7086-2, BS 6748, Ordinance of MH No. 38/2001 Coll.,as amended by further legal acts.)

Samples No. 1A-4A Klaudie 230 ml- tested in mouth edge

Sample No.	Filling volume in ml	concentration in leach for lead in mg Pb/article	concentration in leach for cadmium in mg Cd/article
1A	43	<0,01	<0,001
2A	45	<0,01	<0,001
3A	43	<0,01	<0,001
4A	45	<0,01	<0,001
average		<0,01	<0,001

It agrees with requirements of the standards ČSN 70 8005, DIN 51 032, ISO 7086-2, BS 6748 and Ordinance of MH No. 38/2001 Coll.,as amended by further legal acts – including consideration of measurement uncertainty.

7. QUALITY SYSTEM REVIEW

Fulfillment of the assumptions for continual quality assurance of certified products is documented:

- Audit report of technical and organizational conditions in the field of production quality assurance from 2014-02-14

8. CONCLUSION

CRYSTALITE Bohemia s.r.o., Zámecká 730, 582 91 Světlá nad Sázavou
plant Světlá nad Sázavou, plant Strání - Květná

**– Kitchenware and beverage glass – mechanically blow-pressed
beverage crystal glass crystalin decorated with gold and platinum on
the top edge and with enamel under mouth edge. Pressed kitchenware
and utility glass**

comply

in basic properties – inner stress, water resistance according to requirements of the standard ČSN 70 8005, in indicator leach from product surface (content of lead and cadmium,harmless to health)to requirements of the standards ČSN 70 8005, DIN 51 032, ISO 7086-2, BS 6748 and Ordinance of MH No. 38/2001 Coll.,as amended by further legal acts.

Concurrently is submitted, that the producer has ensured assumptions for continual quality assurance of certified products in the plant.




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CERTIFICATION DECISION

Based on the results of Certification Protocol CA-3/2014 I decide – give certificate to the applicant CRYSTALITE Bohemia s.r.o., Zámecká 730, 582 91 Světlá nad Sázavou, plant Světlá nad Sázavou, plant Strání – Květná for products – Kitchenware and beverage glass – mechanically blow-pressed beverage crystal glass crystalin decorated with gold and platinum on the top edge and with enamel under mouth edge. Pressed kitchenware and utility glass – the products agree with the requirements of the standards ČSN 70 8005, DIN 51 032, ISO 7086-2, BS 6748, GOST 30407 and the Ordinance of MH No. 38/2001 Coll.,as amended by further legal acts.

2014-04-01


 Lubomír Hnilička
 Manager of Certification Body

