



Hong Kong Government Recognized Service Supplier
Approved Laboratory of The Woolmark Company

Members of :
American National Standards Institute
American Society for Testing and Materials
British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited
Hong Kong Toys Council

TEST REPORT

NUMBER: HJ00623315

APPLICANT: LITECUBES LLC
751 TURQUOISE ST
SAN DIEGO CA 92109
USA
ATTN: TERRY HICKEY

DATE: Dec 21, 2007

SAMPLE DESCRIPTION:

TWO (2) GROUPS OF SUBMITTED SAMPLE SAID TO BE :

- (A) ITEM NAME : **LIGHT UP DRINKING STRAW.**
 LABELLED AGE GROUP : NOT INTENDED FOR USE BY CHILDREN UNDER THE
 AGE OF 3.
 QUANTITY : 20 PIECES.
 PACKAGING PROVIDED : YES.
 BY APPLICANT
 COUNTRY OF ORIGIN : CHINA.
- (B) ONE BOTTLE OF BLACK INK (POLYBAG) FOR (A) USED.

TESTS CONDUCTED:

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)

TO BE CONTINUED

FOR AND ON BEHALF OF :
INTERTEK TESTING SERVICES HK LTD.

KAREN S.C. NG
GENERAL MANAGER



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CONCLUSION:

<u>TESTED SAMPLES</u>	<u>STANDARD - U.S. ASTM F963-07^{e1}</u>	<u>RESULT</u>
GROUP (A)	PHYSICAL AND MECHANICAL TESTS	PASS

FLAMMABILITY TEST OF MATERIALS OTHER THAN TEXTILE MATERIALS	PASS
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GROUP (B)	TOXIC ELEMENTS TEST	PASS
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<u>TESTED SAMPLE</u>	<u>STANDARD</u>	<u>RESULT</u>
TESTED COMPONENT OF	U.S. 21 CFR F.D.A. REGULATION	PASS

GROUP (A) (SHORT TUBE & STOPPER OF LIGHT UP DRINKING STRAW)	PART 177.1520 CLAUSES (c) (1.1a AND 1.1b) ON POLYPROPYLENE	
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TESTED COMPONENT OF GROUP (A) (HOT CONSTRINGENCY TUBE OF LIGHT UP DRINKING STRAW)	U.S. 21 CFR F.D.A. REGULATION PART 177.1350 CLAUSE B ON ETHYLENE-VINYL ACETATE COPOLYMER (EVA)	PASS
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TESTED COMPONENT OF GROUP (A) (DRINK TUBE)	U.S. 21 CFR F.D.A. REGULATION PART 177.1520 CLAUSES (c) (2.1) ON POLYETHYLENE	PASS
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TESTED COMPONENT OF GROUP (A) (WING)	U.S. 21 CFR F.D.A. REGULATION PART 180.22 ON FINISHED FOOD CONTACT ARTICLE INTENDED FOR REPEATED USE WHEN USING DISTILLED WATER, 3% ACETIC ACID AND N-HEPTANE AS FOOD SIMULATING SOLVENT	PASS
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TO BE CONTINUED

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CONCLUSION:

<u>TESTED SAMPLES</u>	<u>STANDARD</u>	<u>RESULT</u>
BUTTON CELL OF GROUP (A)	THE U.S. MERCURY CONTAINING AND RECHARGEABLE BATTERY MANAGEMENT ACT 13 MAY 1996	PASS

REMARK : THE FINAL PRODUCT OR ITS PACKAGING MUST BE MARKED WITH THE
NAME AND ADDRESS OF THE PRODUCER OR DISTRIBUTOR AS SPECIFIED
IN SECTION 7.1 OF U.S. ASTM F963-07^{e1}.

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TESTS CONDUCTED

1 PHYSICAL AND MECHANICAL TESTS ON GROUP (A)

AS PER ASTM STANDARD CONSUMER SAFETY SPECIFICATION FOR TOY SAFETY F963-07^{e1}.

APPLICANT'S SPECIFIED AGE GROUP FOR TESTING : FOR AGES 3 AND UP.

THE SUBMITTED SAMPLES WERE UNDERGONE THE USE AND ABUSE TESTS IN ACCORDANCE WITH THE FEDERAL HAZARDOUS SUBSTANCES ACT (FHSA), TITLE 16, CODE OF FEDERAL REGULATIONS : -

<u>TEST</u>	<u>FHSA</u>	<u>PARAMETER</u>
IMPACT TEST	SECTION 1500.53 (b)	4 X 3.0 ft
TORQUE TEST	SECTION 1500.53 (e)	4 in-lbf
TENSION TEST	SECTION 1500.53 (f)	15 lbf
COMPRESSION TEST	SECTION 1500.53 (g)	30 lbf

<u>SECTION</u>	<u>TESTING ITEMS</u>	<u>ASSESSMENT</u>
4.1	MATERIAL QUALITY (VISUAL CHECK ON CLEANINGLESS)	P
4.5	SOUND-PRODUCING TOYS	NA
4.6.1	TOYS INTENDED FOR CHILDREN UNDER 36 MONTHS (SMALL OBJECTS)	NA
4.6.2	MOUTH-ACTUATED TOYS	NA
4.6.3	TOYS AND GAMES FOR 36 MONTHS TO 72 MONTHS (SMALL PART WARNING)	NA
4.7	ACCESSIBLE EDGES	P
4.8	PROJECTIONS	NA
4.9	ACCESSIBLE POINTS	P
4.10	WIRES OR RODS	NA
4.11	NAILS AND FASTENERS	NA
4.12	PACKAGING FILM	NA
4.13	FOLDING MECHANISMS AND HINGES	NA
4.14	CORDS AND ELASTICS	NA
4.15	STABILITY AND OVER-LOAD REQUIREMENTS	NA
4.16	CONFINED SPACES	NA
4.17	WHEELS, TIRES AND AXLES	NA
4.18	HOLES, CLEARANCE, AND ACCESSIBILITY OF MECHANISMS	NA



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<u>SECTION</u>	<u>TESTING ITEMS</u>	<u>ASSESSMENT</u>
4.19	SIMULATED PROTECTIVE DEVICES, SUCH AS HELMETS, HATS AND GOGGLES	NA
4.20	PACIFIERS	NA
4.21	PROJECTILE TOYS	NA
4.22	TEETHERS AND TEETHING TOYS	NA
4.23	RATTLES	NA
4.24	SQUEEZE TOYS	NA
4.25	BATTERY-OPERATED TOYS	P
4.26	TOYS INTENDED TO BE ATTACHED TO A CRIB OR PLAYPEN	NA
4.27	TOY CHESTS	NA
4.28	STUFFED AND BEANBAG-TYPE TOYS	NA
4.29	STROLLER AND CARRIAGE TOYS	NA
4.30	ART MATERIALS	NA
4.31	TOY GUN MARKING	NA
4.32	BALLOONS	NA
4.33	CERTAIN TOYS WITH SPHERICAL ENDS	NA
4.34	MARBLES	NA
4.35	BALLS	NA
4.36	POMPOMS	NA
4.37	HEMISPHERIC-SHAPED OBJECTS	NA
4.38	YOYO ELASTIC TETHER TOYS	NA
4.39	MAGNETS	NA
5	LABELLING REQUIREMENT	P
6	INSTRUCTIONAL LITERATURE	P
7	PRODUCER'S MARKINGS	
	- NAME OF PRODUCER/DISTRIBUTOR (TOY/PACKAGE)	NO
	- ADDRESS (TOY/PACKAGE)	NO



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3 TOXIC ELEMENTS ANALYSIS ON GROUP (B)

AS PER SECTION 4.3.5 OF THE ASTM STANDARD CONSUMER SAFETY SPECIFICATION ON TOY SAFETY F963-07^{e1}, ACID DIGESTION AND EXTRACTION METHODS WERE USED AND TOXIC ELEMENTS CONTENT WERE DETERMINED BY INDUCTIVELY COUPLED ARGON PLASMA SPECTROMETRY.

	<u>RESULT IN ppm</u>	<u>LIMIT</u> <u>ppm</u>
TOTAL LEAD (Pb)	<10	600
SOL. BARIUM (Ba)	<5	1000
SOL. LEAD (Pb)	<5	90
SOL. CADMIUM (Cd)	<5	75
SOL. ANTIMONY (Sb)	<5	60
SOL. SELENIUM (Se)	<5	500
SOL. CHROMIUM (Cr)	<5	60
SOL. MERCURY (Hg)	<5	60
SOL. ARSENIC (As)	<2.5	25

SOL. = SOLUBLE

< = LESS THAN

ppm = PARTS PER MILLION BASED ON DRY WEIGHT OF SAMPLE

REMARK : SINCE THE COATING OF THE SUBMITTED SAMPLE WAS LESS THAN 10mg, PAINT WAS USED FOR THE TOXIC ELEMENTS ANALYSIS.

DATE SAMPLE RECEIVED : NOV 06, 2007

TESTING PERIOD : NOV 06, 2007 TO NOV 24, 2007



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4 MERCURY (Hg) CONTENT ON BUTTON CELL OF GROUP (A)

WITH REFERENCE TO EPA/SW-846 BY ATOMIC ABSORPTION
SPECTROPHOTOMETRIC ANALYSIS.

RESULT : 5.1 mg/CELL

LIMIT : 25 mg/CELL (MAX)

DATE SAMPLE RECEIVED : NOV 06, 2007

TESTING PERIOD : NOV 06, 2007 TO NOV 27, 2007

5 TEST FOR F.D.A. REGULATION ON POLYPROPYLENE ON GROUP (A)

AS PER THE U.S. 21 CFR FOOD AND DRUG ADMINISTRATION PART 177.1520
CLAUSES (c) (1.1a AND 1.1b) AND (d) WITH MODIFICATION ON DENSITY AND
MELTING POINT.

	<u>RESULT</u>	<u>LIMIT</u>
(A) DENSITY (BY SINK FLOAT METHOD)	0.91	0.880 - 0.913
(B) MELTING POINT, °C (BY MELTING POINT APPARATUS)	167	160 - 180 (1.1a) 150 - 180 (1.1b)
(C) MAXIMUM EXTRACTABLE FRACTION IN N-HEXANE, % (w/w)	<1.0	6.4
(D) MAXIMUM EXTRACTABLE FRACTION IN XYLENE, % (w/w)	1.5	9.8

REMARK : < = LESS THAN

TESTED COMPONENT :

WHITE PLASTIC (SHORT TUBE & STOPPER OF LIGHT UP DRINKING STRAW).

DATE SAMPLE RECEIVED : NOV 06, 2007

TESTING PERIOD : NOV 06, 2007 TO DEC 18, 2007



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6 TEST FOR F.D.A. REGULATION ON EVA ON GROUP (A)

AS PER THE U.S. 21 CFR FOOD AND DRUGS ADMINISTRATION PART 177.1350,
CLAUSE B.

	<u>RESULT</u> (mg/in ²)	<u>LIMIT</u> (mg/in ²)
CHLOROFORM SOLUBLE EXTRACTIVE RESIDUE IN WATER EXTRACTANT	<0.10	0.5

REMARK : < = LESS THAN

TESTED COMPONENT :

TRANSPARENT PLASTIC (HOT CONSTRINGENCY TUBE OF LIGHT UP DRINKING
STRAW) .

DATE SAMPLE RECEIVED : NOV 20, 2007
TESTING PERIOD : NOV 20, 2007 TO NOV 27, 2007

7 TEST FOR F.D.A. REGULATION ON POLYETHYLENE ON GROUP (A)

AS PER THE U.S. 21 CFR FOOD AND DRUG ADMINISTRATION PART 177.1520
CLAUSES (c) (2.1) AND (d) WITH MODIFICATION ON DENSITY.

	<u>RESULT</u>	<u>LIMIT</u>
(A) DENSITY (BY SINK-FLOAT METHOD)	0.92	0.85 - 1.00
(B) MAXIMUM EXTRACTABLE FRACTION IN N-HEXANE % (w/w)	1.3	5.5
(C) MAXIMUM EXTRACTABLE FRACTION IN XYLENE % (w/w)	3.3	11.3

TESTED COMPONENT :

WHITE PLASTIC (DRINK TUBE OF LIGHT UP DRINKING STRAW) .

DATE SAMPLE RECEIVED : NOV 20, 2007
TESTING PERIOD : NOV 20, 2007 TO NOV 27, 2007



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8 TEST FOR F.D.A. REGULATION ON ACRYLONITRILE COPOLYMERS ON GROUP (A)

AS PER THE U.S. 21 CFR FOOD AND DRUG ADMINISTRATION PART 180.22.

<u>SOLVENT</u>	<u>ACRYLONITRILE MONOMER</u> (mg/in ²)	<u>LIMIT (MAX)</u> (mg/in ²)
DISTILLED WATER	<0.0003	0.003
3% ACETIC ACID	<0.0003	0.003
N-HEPTANE	<0.0003	0.003

REMARK : < = LESS THAN

TESTED COMPONENT :

WHITE PLASTIC (WING OF LIGHT UP DRINKING STRAW) .

DATE SAMPLE RECEIVED : NOV 20, 2007

TESTING PERIOD : NOV 20, 2007 TO NOV 26, 2007

END OF REPORT