

TECHNICAL REPORT

Report # 24606

Thames & Kosmos, LLC
207 High Point Avenue
Portsmouth, RI 02871

May 3, 2004



Requested by: Ted McGuire
Authorization Received: April 15, 2004
Sample Name: Kosmos Ice Cream Maker Expiration Kit
Model/Style #: N/A
Sample Received: April 15, 2004
Number of Samples: 1
Labeled Age Group: Not Labeled
Age Grading to be Applied: 8 +
Condition Received: Good
Testing Completed: April 22, 2004

SUMMARY:

RESULTS

FDA, FSS Extraction:

21 CFR Part 177

DOES COMPLY

Flammability:

ASTM F963-96a & 16 CFR 1500.44

DOES COMPLY

Mechanical Hazards:

ASTM F963-96a

DOES COMPLY

Reviewed by:

A handwritten signature in black ink, appearing to read "Jeffrey D. Lipko".

Jeffrey D. Lipko
Technical Director, Hardlines
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TEST FOR F.D.A. REGULATION ON POLYPROPYLENE:**Procedure:**

As per the US 21 CFR Food and Drug Administration Part 177.1520 clauses (c) (1.1a) and (1.1b) on Polypropylene.

Sample ID: **Kosmos Ice Cream Maker Expirament Kit**
Plastics: 1) **Red Container (PP)**
 2) **Green Lid (PP)**

Results:

		Result		Limit
		(1)	(2)	
(A)	Density (By Sink Float Method)	0.902	0.905	0.880 – 0.913
(B)	Melting Point, °C (By Melting Point Apparatus)	166	167	160 – 180 (1.1a) 150 – 180 (1.1b)
(C)	Maximum Extractable Fraction in N-Hexane, % (w/w)	0.5	0.5	6.4
(D)	Maximum Extractable Fraction in Xylene, % (w/w)	5.8	6.1	9.8

Conclusion:

When tested as specified, the submitted sample **does comply** with the US 21 CFR Regulation Part 177.1520 clauses (c) (1.1b) on polypropylene.

TEST FOR F.D.A. REGULATION ON POLYETHYLENE:**Procedure:**

As per US 21 CFR Regulation Part 177.1520 clauses (c) (2.1) on polyethylene.

Sample ID: **Kosmos Ice Cream Maker Expirament Kit**
Plastics: 3) **White Container (HD-PE)**

Results:

		Result	Limit
		(3)	
(A)	Density (By Sink Float Method)	0.95	0.85 – 1.00
(C)	Maximum Extractable Fraction in N-Hexane, % (w/w)	0.3	5.5
(D)	Maximum Extractable Fraction in Xylene, % (w/w)	1.6	11.3

Conclusion:

When tested as specified, the submitted sample **does comply** with the US 21 CFR Regulation Part 177.1520 clauses (c) (2.1) on polyethylene.

Flammability Test: Federal Hazardous Substances Act and ASTM F963-96a**Procedure:**

The method of testing was that described in **16 CFR 1500.44** of the *Federal Hazardous Substances Act and ASTM F963-96a* for rigid and pliable solids.

Requirement:

A material is considered "flammable" if it ignites and burns with a self-sustained flame at a rate greater than 0.1 inches per second along its major axis.

NOTE:

It is our understanding that a sample is considered as having passed the test requirement if it self-extinguishes before burning 6 inches and prior to the lapse of 60 seconds.

Sample ID: Kosmos Ice Cream Maker Experiment Kit

Test Results:

	<u>Area of Initial Flame Contact</u>	<u>Burn Length (inches)</u>	<u>Time (seconds)</u>	<u>Burn Rate (inches/second)</u>
Burn 1	Top Edge	--	--	DNI
Burn 2	Bottom	--	--	DNI
Burn 3	Top Edge	--	--	DNI
Burn 4	Bottom	--	--	DNI

*DNI = Did not Ignite

**IBE = Ignited but Extinguished

Conclusion:

Based upon the results of the test reported above, the submitted sample **does comply** with the requirements of the U.S. Federal Hazardous Substances Act, 16 CFR 1500.44 and ASTM F963-96a, Section 4.2.

