



A Smithers Group Company

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Certificate number: SCHUR 020

12th July 2006

Grunddata: 271972 01 0000.0091 08.12.2006 R
60200-00494/2006 300.00

Certificate of Conformity

A batch of CPA/PE laminate ice cube bags have been provided to Rapra Technology for migration testing. Tests to show conformity to the current EC food legislation under the following conditions have been requested:

3% acetic acid simulant, 10 days at 40°C

Under these conditions, the CPA/PE laminate ice cube bags have been found to comply with EC Directive 2002/72/EC and amendments for overall migration with data obtained being within the limit of 10mg/dm².

All testing was undertaken between 16th June and 3rd July 2006.

Data is as reported in Rapra CTR number 46446, project number AN0161.

Rapra is a UKAS accredited Testing Laboratory number 0067.

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Confidential Technical Report
46446

Date: 12th July 2006



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PROJECT NO: AN0161

Grundfos. 271973 01 0000.0091 08.12.2006 RA
60200-00485/2006 300.00 K

OVERALL MIGRATION TESTING OF ICE CUBE BAGS

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OVERALL MIGRATION TESTING OF ICE CUBE BAGS

1. INTRODUCTION

A batch of CPA/PE laminate ice cube bags were supplied to Rapra Technology on the 9th June 2006. Testing of the ice cube bags to the overall migration requirements of the current EC food regulations was requested, for use in contact with plain and flavoured water.

2. EXPERIMENTAL

Overall migration testing was undertaken on the bags in triplicate using the article filling procedure (essentially to EN 1186, part 9).

100ml of 3% acetic acid simulant was carefully poured into an ice cube bag and the bag then sealed using a heat sealer. The bag was then placed into a thermostatically controlled oven at 40°C for 10 days. Duplicate blank simulants were also tested for 10 days at 40°C in clean, glass stoppered tubes.

After 10 days testing, the test simulant was carefully poured from the bags into glass stoppered tubes before being carefully evaporated to dryness in pre-conditioned glass dishes. Blank simulants were also evaporated to dryness.

All analytical testing was undertaken between 16th June and 3rd July 2006.

3. RESULTS

The overall migration from the ice cube bags was determined as follows:

Test Simulant	Overall Migration mg/dm ²	Mean
3% acetic acid	0.1, 0.1, 0.2	0.1

The EC Directive limit for overall migration is 10mg/dm². Data obtained for the ice cube bags is well within this limit, under the tested conditions.

4. CONCLUSIONS

The batch of CPA/PE laminate ice cube bags supplied to Rapra on the 9th June, 2006 have been tested to the overall migration requirements of the current EC food regulations.

From the data obtained, the overall migration from the ice cube bags has been determined as being within the EC Directive limit of 10mg/dm², under the tested conditions.

All data is as reported in the Results section of this report.

5. DISCUSSION

The Polymer Analysis and Testing areas of Rapra Technology are accredited to BS EN ISO/IEC 17025: 2000. This accreditation is very specific and while all of the activities of the Analysis and Testing areas are carried out in accordance with the requirements of BS EN ISO/IEC 17025, there is a specific schedule of tests that are actually accredited - parts of this schedule can be viewed on the Rapra web site.

The BS EN ISO/IEC 17025 accreditation is audited by the United Kingdom Accreditation Service (UKAS) and Rapra Technology Shawbury is identified as Testing Laboratory No. 0067.

SMITHERS RAPRA LIMITED TRADING AS RAPRA TECHNOLOGY
CONDITIONS OF BUSINESS – 11-04-2006

FORMATION OF CONTRACT

- 1.1 All quotations are made and all orders are accepted subject to the following conditions. All other terms, conditions or warranties whatsoever are excluded from any contract between the parties unless expressly accepted by Rapra Technology ("Rapra") in writing.
- 1.2 Quotations shall be available for acceptance for a maximum period of 30 days from the dates thereof and may be withdrawn by Rapra within such period at any time by written or oral notice. "Work" shall mean the work and services that Rapra agree to provide in the quotation.
- 1.3 If any statement or representation has been made to the Client by Rapra, or its employees upon which the Client relies (other than in the documents enclosed with Rapra's quotation) then the Client must set out that statement or representation in a document to be attached to the return copy of the quotation and in any such case Rapra may accept or reject the same and/or submit a new quotation.
- 1.4 The supply of materials, products or information by the Client pursuant to the quotation shall constitute acceptance of these conditions where acceptance has not previously been communicated by the Client to Rapra.

PRICES

- 2.1 All prices are, unless otherwise stated, quoted net exclusive of VAT.
- 2.2 All requests for variations or addition to the Work must be made by the Client in writing. In the event of any variation or addition being so requested and agreed to by Rapra, Rapra shall be entitled to make an adjustment to the contract price fairly reflecting such variation or addition.

PAYMENT

- 3.1 Unless otherwise agreed by Rapra in writing the terms of payment shall be 30 days from receipt of invoice by the Client, which shall be deemed to be two working days after posting. Rapra may submit interim invoices in respect of each stage of Work completed for the Client.
- 3.2 Rapra reserves the right to vary the payment terms of this contract in the event that it considers payment in advance (in part or whole) is necessary.
- 3.3 No disputes arising under the contract nor delays beyond the reasonable control of Rapra shall interfere with prompt payment in full by the Client.
- 3.4 In the event of default in payment by the Client Rapra shall be entitled at its option to treat the whole contract as repudiated by the Client or to suspend all further work on any contract or contracts between Rapra and the Client without notice and to charge interest on any amount outstanding at the rate of 2% per annum above the Base Rate of National Westminster Bank plc in force at the time when payment was due.

COMPLETION

- 4.1 Time for completion of Work is given as accurately as possible but is not guaranteed. The Client shall have no right to damages or to cancel the order for failure for any cause to meet any time stated for completion of Work.
- 4.2 Any estimate of the date of completion of Work shall in every case be dependent upon prompt receipt of all necessary information, instructions or approvals from the Client. Variations or additions to the Work requested by the Client may result in delay in completion.

CANCELLATION

5. Either party may cancel the contract on 30 days written notice to the other on condition that all costs and expenses incurred by Rapra up to the time of cancellation and, where cancellation is at the insistence of the Client, all loss of profits and other loss or damage resulting to Rapra by reason of such cancellation, will be paid forthwith by the Client to Rapra.

LIABILITY

- 6.1 Rapra undertakes that it will indemnify and keep the Client indemnified against all liabilities, costs and expenses in respect of claims in relation to death or injury to persons or damage to tangible property to the extent that such death, injury, loss or damage is attributable to the negligent acts or omissions of Rapra, its officers, employees, agents or sub-contractors.
- 6.2 Save where Rapra is shown to have failed to exercise reasonable care in the performance of the Work and such failure results in death or personal injury, Rapra shall not be liable in respect of claims arising by reason of death or personal injury. Further, under no circumstances whatsoever shall Rapra be liable for consequential loss, loss of profits, damage to property or wasted expenditure.
- 6.3 Rapra's liability, whether in respect of one claim or the aggregate of various claims other than claims for death or personal injury due to negligence on the part of Rapra shall not exceed £500,000 in any Year and the Client agrees to insure adequately to cover claims in excess of such amount.

CONFIDENTIAL INFORMATION AND INDUSTRIAL PROPERTY RIGHTS

- 7.1 All data, information and reports are produced for the benefit of the addressee only. Rapra accepts no liability arising from unauthorised use of such information or reports by a third party.
- 7.2 The Client shall not reproduce or abstract for the purpose of advertising or otherwise any report or other information on the Work or use the name of Rapra either expressly or by implication in any of its advertising or sales promotional material without the prior written consent of the Company Secretary of Rapra.
- 7.3 All drawings, documents, confidential records, computer software and other information supplied by Rapra are supplied on the express understanding that copyright is reserved to Rapra and that the Client will not, without the written consent of Rapra, either give away, loan, exhibit or sell any such drawings, documents, records, software or other information or extracts therefrom or copies thereof or use them in any way except in connection with the Work in respect of which they are issued.
- 7.4 All Intellectual Property Rights belonging to or otherwise in the control of either party prior to entering into the contract shall remain the property of the party owning such Intellectual Property Rights.
- 7.5 All title and ownership of, or relating to, any intellectual property, including, but not limited to ideas, inventions, discoveries, creations, improvements or any other property subject to patent protection or intellectual property rights as developed or resulting from work under this agreement, shall directly or indirectly be solely owned by Rapra Technology unless otherwise agreed to in writing by all participating parties.
- 7.6 In the event that Rapra Technology does not wish to apply for or maintain patent protection for any invention owned by it in accordance with clause 7 herein, it will on request assign its rights in respect of that patent to the client but in any event Rapra Technology shall be granted a royalty free, irrevocable, non-exclusive, world-wide right to use such Intellectual Property Rights assigned under this condition 7.6.
- 7.7 Rapra Technology will on request grant rights to the client for exploitation or patenting of the ideas, inventions, discoveries, creations, improvements arising from the work, in the client's traditional or defined new areas of business. In all other areas, rights remain vested with Rapra Technology.

SAMPLES

8. Rapra retains the right to return or dispose of the samples at the customers cost after a period of 6 months unless otherwise agreed with the client. Storage of the samples beyond the initial 6 month period will be charged for, invoiced in advance for the agreed period (minimum additional 6 months).

CUSTOMER'S INFORMATION

- 9.1 The Client shall be solely responsible for ensuring that all drawings, information, advice and recommendations given to Rapra, either directly or indirectly by the Client or by the Client's agents, servants, consultants or advisers, are accurate and sufficient for completion of the Work. Examination or consideration by Rapra of such drawings, information, advice or recommendations shall in no way limit the Client's responsibility hereunder unless Rapra specifically agrees in writing to accept responsibility.
- 9.2 Rapra shall not disclose to any third party any knowledge or information relating to the Work which is, on receipt by Rapra, marked 'confidential' by the Client unless and until such information becomes public knowledge.

INSOLVENCY

10. If either party shall become bankrupt or under the provisions of Section 123 of the Insolvency Act 1986 is deemed to be unable to pay its debts or compounds with creditors or in the event of a resolution being passed or proceedings commenced for its administration or liquidation (other than for a voluntary winding up for the purposes of reconstruction or amalgamation) or if a Receiver or Manager is appointed of all or any part of its assets or undertaking, the other party shall be entitled to cancel the contract in whole or in part by notice in writing without prejudice to any other right or remedy accrued or accruing to that party.

FORCE MAJEURE

11. In the event of the performance of any obligation accepted by Rapra being prevented, delayed, or in any way interfered with by direction of government, war, industrial dispute, strike, breakdown of machinery or plant, accident, fire or by any other cause beyond Rapra's control Rapra may at its option suspend performance or cancel its obligations under the contract without liability for any damage or consequential loss resulting therefrom, such suspension or cancellation being without prejudice to Rapra's right to recover all sums owing to it in respect of works performed and costs incurred prior to the date of suspension or cancellation.

ASSIGNMENT

12. This Contract is personal to the parties and may not be assigned or transferred without the prior written consent of the other party.

LEGAL

13. The contract shall be governed and interpreted exclusively according to the Law of England and shall be subject to the jurisdiction of the English Courts only.



**ISEGA – Forschungs-
und Untersuchungs-
Gesellschaft mbH
Aschaffenburg**



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Aschaffenburg, 1 June 2006

From: Dr. Zechmann
sh

Report

Order No.: 4324/15b Page 1 of 3 pages

Client: Schur Inventure a/s, Vejle/Denmark

Date of order: 1 May 2006

Receipt of sample material: 3 May 2006


Origin of sample material: From the client

Purpose: Analysis of four ice cube bags for their direct*transition of taste

Grundfags. 271971 01 0000.0091 08.12.2006 RA
60200-00483/2006 300,00 K

Schur®
Niels Finsensvej 11 DK-7100 Vejle, Tel. +45 70 90 22 24

(Dr. Derra)


(Dr. Zechmann)
Officially certified
and registered food
chemist

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The present report refers exclusively to the samples as laid out therein. Information and statistical data on the results can be obtained on request.

Non-accredited determinations have not been validated at the date of the accreditation. Individual determinations were not intended for accreditation owing to their restricted field of application. In these cases, the necessary accuracy for the evaluation is ensured by the internal quality management system.

Geschäftsführer: Dr. Ralph Derra, Dr. Marion Hasselberg · Handelsregister: Aschaffenburg HRB 3329

Die Veröffentlichung von Ergebnissen unserer Arbeiten und Gutachten sowie die Verwendung für Werbezwecke bedürfen – auch auszugsweise – unserer schriftlichen Genehmigung.
Erfüllungsort und Gerichtsstand Aschaffenburg

Sample Material

For analysis the following sample material was in hand:

Ice cube bags, designated as samples 82 to 85

Carrying out of the Tests

Examination period: 4 May 2006 to 19 May 2006

1. Sensory Analysis for Direct Transition of Taste *

The examination was made according to DIN 10 955.

The sample was filled with drinking water and stored in the dark at

A	5 °C
B	23 °C
C	40 °C

for 10 days.

Subsequently, possible off-flavours of the water were evaluated by six assessors in an extended triangular test according to DIN ISO 4120. Water which had been stored under the same conditions but without the test sample was used as reference material.

Result:

The following evaluations (median) were obtained:

Sample 82:

Condition A:	< 1	
Condition B:	1.0	Description: slight taste like plastic
Condition C:	1.0	Description: slight taste like plastic

Sample 83: = 7243.03

Condition A:	< 1
Condition B:	< 1
Condition C:	< 1

Sample 84:

Condition A:	1.0	Description: slightly bitter
Condition B:	< 1	
Condition C:	< 1	

Sample 85:

Condition A:	< 1
Condition B:	< 1
Condition C:	< 1

Wherever there is a result of "< 1" no statistically confirmed difference could be noticed between the water which had been stored in direct contact with the sample and the water which had been stored without the sample.

Scale of intensity:

- 0 = no perceptible off-flavour
- 1 = off-flavour just perceptible (still difficult to define)
- 2 = moderate off-flavour
- 3 = moderately strong off-flavour
- 4 = strong off-flavour

The accreditation applies to the methods marked with * in the test report (Register no. DAC-P-0035-97-10).

End of report

DATA Sheet

Schur Laminate CPA transp. 20my // PE transp. 40 my

Film Characteristics

Quality	Method	Unit	Value
Thickness	ASTM D 374	μ	60
Unit weight	RFM 3	g/m ²	62-63
Weight adhesive	RFM 3	g/m ²	1,6
Sealing area (inside)	Internal		Below 120 °C
Bond strength	Internal	N/15mm	> 3,5
C.O.F	ASTM D 1894	Tr / Tr	0,21
		Seal / Seal	0,38
W.V.T.R	ASTM E 96 (37,8°C, 100% rh)	g/m ² /24h	-

The above results and properties refer to the average values of laboratory tests on samples of our standard production. The information given is based on our general experience and given in good faith. No warranty is given with respect to such information (data variations and laboratory measurements). The test methods are always according to the latest edition of the standards.

Approvals

We certify that the materials used in this product are intended for use in contact with food, as described in:

EU	EU Directive 90/128/EEC
USA	FDA 21 CFR 177.1520
Germany	BgVV Empfehlung III

Furthermore we certify that the materials used all comply with the requirements of the "Packaging and Packaging Waste" Directive 94/62/EEC (sum of lead, mercury, cadmium and hexavalent chromium is below 100 ppm).

Film Storage

Recommended dry conditions below 30°C.

Safety declaration:

Schur Flexible Denmark a/s, Gl. Skartved 11, 6091 Bjert, Denmark declare under our sole responsibility that the product produced with

- **Name:** Polyethylene film, quality 7243.03-40 μ
- **Type:** Extruded LDPE film
- **Dimension:** 2 x 910mm x 0,04mm
- **Item No.:** ES-13677.

to which this declaration relates is in conformity with the following directives, standards and documents:

- The raw materials used in this product are intended for use in contact with food, as described in:
 - **EU Directive 2002/72/EC and amendments.**
 - **FDA 21 CFR 177.1520** under conditions of use B through H of table 2 in Title 21 CFR part 176.170 (c).
 - **Content of Heavy metals:** Cadmium. Mercury Lead, Hexavalent Chromium (the total concentrations of these materials are less than the 100 ppm as limit in **EU Packing Waste Directive 94/62/EC**).
- **Quality assurance system**, which is in compliance with the DS/EN ISO 9001:2000 standard comprising full traceability and annual external audit.
- **Hygiene assurance system** certified according to the ADAS Hygiene Accreditation Standard and two annual external audits.

The film, item No. ES-13677 is a part of

Schur Laminate CPA transp.20 my//PE transp.40 my

produced at Schur Inventure a/s and to be delivered to

Customer: ICJ – Technology, 119270 Moscow, Russia

Date of issue: 06-12-2006

Schur Flexible Denmark a/s