

מוסד הטכניון למחקר ופתוח בע"מ



TECHNION RESEARCH AND DEVELOPMENT FOUNDATION LTD.

המעבדה לאריזה
PACKAGING LABORATORY

SYFAN
Kibutz Saad
D.N. Hanegev 85149
Att: Mr. Israel Sarid

Fax: 086800434

11/5/2009

Sir,

Re: Polyolefin film AFX is intended to come in contact with foods and manufactured by "SYFAN" tests according to FDA

Description of samples: Polyolefin film coded AFX, manufactured by "SYFAN". The sample was selected and delivered to the Packaging Laboratory by the client.

Purpose of tests: To evaluate the suitability of the plastic film to come in contact with foods according to FDA. Code of Federal Regulations Title 21.

Method of tests: The tests were done according to:

1. FDA, Code of Federal Regulations 21 & 177.1520: Olefin polymers.
2. & 76.170, Table 1: Types of Raw and Processed Foods, and Table 2: Test Procedures with Time Temperature Conditions for Determining Amount of Extractives from the Food – Contact Surface of Uncoated and Coated Paper and Paperboard.
3. FDA Guidance for industry: Preparation of Premarket Submission for Food Contact Substances: Chemistry Recommendations, Updated June 2008.
4. Israeli standard 5113: Plastic materials and plastic articles in contact with food and beverages.

The following simulants were used:

1. **Maximum extractable in water:** the film was extracted with water for 2 hours at 250°F (121°C), followed by evaporation and determination of the residual extract.
2. **Maximum extractable in 3% acetic acid:** the film was extracted with 3% acetic acid for 4 hours at 212°F (100°C), followed by evaporation and determination of the residual extract.
3. **Maximum extractable in 95% alcohol:** the film was extracted with alcohol for 6 hours at 140°F (60°C), followed by evaporation and determination of the residual extract.
4. **Maximum extractable in heptane:** the film was extracted with heptane for 2 hours at 150°F (66°C), followed by evaporation and determination of the residual extract.

SEYFAN65E

TECHNION CITY, HAIFA 32 000, Tel.:04-8292451, 8292659, 8292903. טל. 32 000, חיפה, מוסד הטכניון, תיבה 32 000

פקס: 972-4-8292903; 972-4-8293603

Results: Results are presented in Tables 1 and they are averages of at least 3 replicates. .

Table 1: Maximum extractable residues from the film (mg/inch²)

Water	3% acetic acid	95% alcohol	Heptane	Max. allowed for simulants
0.16	0.030	0.022	0.14	0.5

Based on above tests, the residual extracts from the plastic film were within the limits of the FDA and Israeli standard 5113, and the film is suitable to be used with all kinds of food products up to 120°C including the use of microwave.

The results refer to the samples tested only.

Sincerely Yours

Joseph Miltz N. Passy
 Prof. J. Miltz Nehama Passy
 Head of laboratory Package Engineer

