

**Test Report No.:** 0168112165a 001

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**Client:** NISSAN STEEL INDUSTRY CO., LTD.  
44-1, Kamochozezukadota, Kizugawashi, Kyoto Fu, 619-1101, Japan

**Test item(s):** PE FILM

**Identification / Model No(s):** FRESHMAMA

**Sample Receiving date:** 2019-04-15

**Testing Period:** 2019-04-19 to 2019-04-29

**Test specification:**

Chemical tests performed for the suitability for contact with foodstuffs complied with the following regulations:

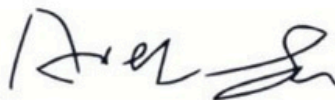
- U.S. FDA Code of Federal Regulations Title 21 (Food and Drugs)

**Test conclusion:**

PASS

**Other Information:****Sample Photo**

(For detailed sample picture please refer to last page)

**For and on behalf of TÜV Rheinland (Shenzhen) Co., Ltd.**

2019-05-31

Date

Axel Su / Assistant Project Engineer

Name / Position



Test result is drawn according to the kind and extent of tests performed.

This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.



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## 1. Sample List:

Sample No.	Material	Color	Location
1	PE	Transparent	Food contact side of film

## 2. Overall Results:

Test No.	Tested Item	Conclusion
1	Extractive Substances for Olefin Polymers	Pass



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### 3. Results

#### 3.1 Extractive Substances for Olefin Polymers

Test method: With reference to FDA 21 CFR 177.1520(d):

Limit: FDA 21 CFR 177.1520(c)

The following simulating solvents and test conditions were stipulated:

Food simulant	Test duration / Temperature
n-Hexane	2 hour(s) / 50°C
Xylene	Reflux for 2 hour(s), cool down at 25°C

Test No.:	1		
Sample No.:	1		
Parameter	Unit	Result	Limit
n-Hexane	%	1.0	5.5
Xylene	%	2.2	11.3

Abbreviations:

% = Percentage

&lt; = Less than

Remark:

\*1 According to FDA 21 CFR 177.1520(c), articles in contact with food should not exceed the following limits:

Category*	Unit	Description	Maximum extractable fraction in	
			n-Hexane	Xylene
1.	%	Polypropylene	6.4	9.8
2.	1.	Polyethylene for use in articles that contact food except for articles used for packing or holding food during cooking	5.5	11.3
	2.	Polyethylene for use in articles used for packing or holding food during cooking	2.6	11.3
3.1.a	%	Olefin copolymers with two or more of the 1-alkenes having 2 to 8 carbon atoms for use in articles that contact food except for articles used for packing or holding food during cooking	5.5	30

\* Most common categories acc. to FDA 21 CFR 177.1520(c) are displayed.



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**4. Sample picture(s):**



Sample No. 1

- END -