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# GAIN Report

Global Agricultural Information Network

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**Date:** 2/2/2012

**GAIN Report Number:**

## **China - Peoples Republic of**

**Post:** Beijing

### **National Food Safety Standard on Polyethylene Resin**

**Report Categories:**

FAIRS Subject Report

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#### **Report Highlights:**

On November 17, 2011, China notified the WTO of National Food Safety Standard: Polyethylene Resin as SPS/N/CHN/482. This standard applies to polyethylene resin made of ethylene homopolymer and copolymers of ethylene and olefin used for food containers and packaging materials. This standard stipulates technical requirements and packaging requirements of polyethylene resin used for food containers and packaging materials. The date for submission of final comments to China is January 16, 2012. The proposed date of entry is to be determined. This report is an INFORMAL translation of this document. Comments can be sent to China's SPS Enquiry Point at [sps@aqsiq.gov.cn](mailto:sps@aqsiq.gov.cn)

**General Information:**  
**BEGIN TRANSLATION**

GB National Food Safety Standard  
GB 9693—XXXX

**National Food Safety Standard**

**Polyethylene Resin**

Date of Issue: XXXX-XX-XX

Date of Effectiveness: XXXX-XX-XX

Issued by the Ministry of Health of the People's Republic of China

**Foreword**

This Standard substitutes GB 9691-88, the Hygienic Standard for Polyethylene Resin Used as Food Packaging Material.

This standard contains the following major modifications on the basis of GB 9691-88:

- Adding the requirements on the terminology and definition, marks, labels, package, transportation, storage and inspection rules;
- Enlarging the applicable scope of the standard;
- Deleting loss on drying and deleting the ignition residue;
- Adding relative density, melt index, viscosity and number average molecular weight.

**Hygienic Standard for Polyethylene Resin Used as Food Containers and Packaging Material**

**1. Scope**

This standard applies to the Polyethylene Resin prepared by homopolymerizing vinyl monomer and by copolymerizing vinyl and olefin that can be used for manufacturing the food containers and packing materials.

**2. Technical requirements**

**2.1 Organoleptic index**

Crystalline and transparent or white granules and no odorant or foreign matter is acceptable.

**2.2 The physical and chemical indexes:**

They shall conform to the provisions in Table 1.

**Table 1 The physical and chemical indexes**

S.N	Classification	Index				
		Relative density (g/cm <sup>3</sup> )	Melt index (g/10 min)	Normal hexane extract (50 °C 2h,%)	viscosity (cp)	Number average molecular weight
1	Ethylene Monomer homopolymer, and the temperature used is <100°C.	--	--	≤5.5	--	--
2	Ethylene Monomer homopolymer, and the temperature used is ≥100°C.	--	--	≤2.6	--	--
3	Copolymers of Ethylene and olefin, the contents of Ethylene and/or propylene is ≥96% (mass fraction) and the temperature used is <100°C.	--	--	≤5.5	--	--
4	Copolymers of Ethylene and olefin, the contents of Ethylene and/or propylene is ≥96% (mass fraction) and the temperature used is ≥100°C.	--	--	≤2.6	--	--
5	Copolymers of Ethylene and hexenes-1 or Ethylene and octenes-1, and the content of Ethylene ≥90% (mass fraction) and the temperature used is < 100°C.	--	--	≤5.5	--	--
6	Copolymers of Ethylene and hexenes-1 or Ethylene and octenes-1, and the content of Ethylene ≥90% (mass fraction) and the temperature used is ≥100°C.	--	--	≤2.6	--	--
7	Copolymers of Ethylene and hexenes-1 and the content of Ethylene ≥80%(mass fraction) and < 90%(mass fraction)	--	--	≤2.6	--	--
8	The copolymers polymerized by two or more monomers of ethylene, propylene, <u>butan-1</u> olefin, 2-methyl	--	--	≤5.5	--	--

	propane-1 olefin and 2,2, 4-trimethylpentane-1 olefin and the contents of Ethylene and /or propylene $\geq$ 85%(mass fraction) and the temperature used is $< 100^{\circ}\text{C}$ .					
--	--	--	--	--	--	--

9	The copolymers polymerized by two or more monomers of ethylene, propylene, <u>butan-1</u> olefin, 2-methyl propane-1 olefin and 2,2, 4-trimethylpentane-1 olefin and the contents of Ethylene and /or propylene $\geq$ 85%(mass fraction) and the temperature used is $\geq$ 100 $^{\circ}\text{C}$ .	--	--	$\leq$ 2.6	--	--
10	Copolymers of Ethylene and hexenes-1 and the content of Ethylene $\geq$ 50%(mass fraction) and the temperature used is $\geq$ 100 $^{\circ}\text{C}$ .	0.85- 0.92	--	--	$\geq$ 6800	--
11	Copolymers of Ethylene and butylene and the content of Ethylene $\geq$ 80% (mass fraction)	$\geq$ 0.88	$\leq$ 5	--	--	--
12	Copolymers of Ethylene and butylene and the content of Ethylene $\geq$ 60% (mass fraction) and the temperature used is $< 100^{\circ}\text{C}$ .	0.85- 0.91	$\leq$ 42	--	--	--
13	Copolymers of Ethylene and hexenes and the content of Ethylene $\geq$ 75% (mass fraction)	0.87- 0.93	--	--	--	$\geq$ 14000

### 2.3 Additives

The usage of the additives shall comply with the provisions in GB 9685.

### 3 Others

The products or the minimum sales package shall be marked with “For Food Contact”.

The products or the minimum sales package shall be marked with material ID of the products.

**END TRANSLATION**