GB

NATIONAL STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

ICS 83.060

G 35

GB/T 14647-2008

Replacing GB/T 14647-1993

Chloroprene rubber CR121, CR122

氯丁二烯橡胶 CR121、CR122

Issued on: June 19, 2008 **Implemented on: December 01, 2008**

Issued by: General Administration of Quality Supervision, Inspection and Quarantine;
Standardization Administration of the People's Republic of China.

Table of Contents

Foreword 3

1 Scope 4

2 Normative references 4

3 Requirements and test methods 5

4 Test method 5

5 Inspection rules 6

6 Packaging, marking, storage and transportation 7

Appendix A (Normative) Determination of volatiles of chloroprene rubber CR121, CR122 8

Chloroprene rubber CR121, CR122

1 Scope

This Standard specifies the requirements, inspection methods, inspection rules, packaging, marking, storage and transportation of CR1211, CR1212, CR1213 in CR121 series and CR1221, CR1222, CR1223 in CR122 series of the sulfur-regulated chloroprene rubber.

This Standard applies to CR1211, CR1212, CR1213, CR1221, CR1222 and CR1223 which are prepared by emulsion polymerization, of which, chloroprene is used as monomer and sulfur as regulator.

2 Normative references

The terms in the following documents become the terms of this Standard by reference to this Standard. For dated references, all subsequent amendments (not including errata content) or revisions do not apply to this standard. However, parties to agreements that are based on this Standard are encouraged to study whether the latest versions of these documents can be used. For undated references, the latest edition applies to this Standard.

GB/T 528-1998, Rubber, vulcanized or thermoplastic - Determination of tensile stress-strain properties (eqv ISO 37:1994)

GB/T 1232.1-2000, Rubber, unvulcanized - Determinations using a shearing-disc viscometer - Part 1: Determination of Mooney viscosity (eqv ISO 289-1:1994)

GB/T 1233-1992, Rubber, unvulcanized - Determination of prevulcanization characteristics - Shearing disk method (neq ISO 667:1981)

GB/T 4498-1997, Rubber - Determination of ash (EQV ISO 247:1990)

GB/T 15340-2008, Rubber, raw natural and raw synthetic - Sampling and further preparative procedures (ISO 1795:2000, IDT)

GB/T 19187-2003, Sampling procedures for inspection of raw synthetic rubber

GB/T 21462-2008, Evaluation procedure of chloroprene rubber (CR)

HG/T 3928-2007, Activated light magnesium oxide for industrial use

Measure according to GB/T 528-1998. Mix according to the mixing method, formula 1 that is specified in GB/T 21462-2008; the rubber mixing mill baffle spacing is 150 mm; type-I cutter. Magnesium oxide shall meet the requirements of HG/T 3928-2007.

4.4 Volatility mass fraction

Homogenize according to GB/T 15340-2008; the homogenization temperature is 20°C ± 5°C; measure according to Appendix A.

4.5 Ash mass fraction

Perform according to method A of GB/T 4498-1997; the sample is about 2 g; the burning temperature is 850°C ± 25°C.

5 Inspection rules

5.1 Except for ash, all items which are listed in this Standard are factory inspection items; under normal circumstances, type inspection is carried out at least once a month.

5.2 When the quality inspection is conducted, sampling shall be carried out in accordance with the provisions of GB/T 19187-2003.

5.3 The manufacturer shall inspect the delivered products according to this Standard, and ensure that all delivered products meet the requirements of this Standard. Each batch of products shall be accompanied by a quality certificate in a certain format. The quality certificate shall indicate contents such as name, designation, manufacturer (company) name, production batch number, grade.

5.4 During the factory inspection, perform the inspection according to the laboratory mixed samples in GB/T 15340-2008; if any one of the factory inspection items does not meet the grade requirements, the sample shall be retained for re-inspection; if the re-inspection result still does not meet the corresponding grade requirements, the batch of products shall be de-graded or set as non-conforming products.

5.5 The user has the right to accept the received products according to this Standard. If the products do not meet the requirements of this Standard, the user shall raise an objection within half a month after the arrival of the products. The end-user shall be responsible for the deterioration of product quality due to improper storage and use. If there is a quality dispute between the supplier and the buyer, the dispute may be settled through negotiation or by the quality arbitration unit in accordance with this Standard. If there is a dispute about the net content of rubber, randomly select 40 packages (all, if the quantity is less than 40 bags) from the whole batch of rubber; weigh the actual total net content.

Appendix A

(Normative)

Determination of volatiles of chloroprene rubber CR121, CR122

A.1 Scope

This Appendix specifies the method for the determination of moisture and other volatile substances in the raw rubber of CR121 and CR122 by the oven method.

A.2 Principle

Dry the sample in an oven for a certain period of time; the mass loss during this process is the volatile content.

A.3 Equipment

A.3.1 Oven: blast type; it can control the temperature at 105°C ± 5°C.

A.3.2 Aluminum dish or glass dish: a depth of 15 mm and a diameter (or length) of about 80 mm.

A.4 Operation steps

A.4.1 Take about 50 g of homogenized rubber samples of 4.4; press into a thin sheet at a roller temperature of 20°C ± 5°C and a roller spacing of 0.25 mm ± 0.05 mm. Cut two parts of about 5 g of samples with a side length of about 2 mm; place in an aluminum dish or a glass dish (A.3.2) and weigh; accurate to 1 mg (mass m_1).

A.4.2 If the sample sticks to the roller and cannot be pressed into a thin sheet, directly cut two parts of about 5 g of samples with a side length of about 2 mm from the sample; place in an aluminum dish or a glass dish (A.3.2) and weigh; accurate to 1 mg (mass m_1).

A.4.3 Place the weighed sample in an oven (A.3.1) at a temperature of 105°C ± 5°C to dry for 1 h; turn on the blast during the drying process. Take out the sample, and place in a desiccator to cool to room temperature; weigh (mass m_2).

A.5 Result expression

The mass fraction (%) of the volatile x is calculated according to Formula (A.1):

$$x = \frac{m_1 - m_2}{m_1} \times 100 \qquad \cdots\cdots (A.1)$$

This is an excerpt of the PDF (Some pages are marked off intentionally)

------ The End ------