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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 21874-2008

**Elastomeric seals -- Requirements for materials for pipe joint
seals used in water and drainage applications -- Thermoplastic
elastomers**

弹性体密封件 排水管道接口密封件材料要求 热塑性弹性体

(English Translation)

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Foreword

This revised standard adopts the International Standard ISO 23711:2003 "elastomeric seal --- drainage channel interface seal material requirements ---Thermoplastic elastomers "(in English).

This standard is based on ISO 23711:2003 redrafted.

Because of the special needs of our industry, this standard at the time of adoption of international standards has been modified. The technical differences between a single vertical line labeled in terms of knowledge involved in their page margin. And ISO 23711:2003 is a technical difference.

--- Compression stress relaxation test method references the reference standard and the international standard ISO 3384:1999 is no correspondence between GB/T 1685-2008, since the stress relaxation test method GB/T 1685-2008 specified simple;

--- References GB/T 2941-2006 identical with ISO 23529:2004, due to ISO 23529:2004 replaces ISO 4661-1.

1993;

--- Chapter 2 normative references in GB/T 1690-1992 is not equivalent to the corresponding international standards;

--- Compression stress relaxation using GB/T 1685-2008, thus deleting the ISO 23711:2003 5.7 second and fourth paragraph, namely Delete "if ISO 3384:1999 means 5.2 in the first paragraph of the continuous measurement, the table 2 and 7d 100d performance requirements are derived from the measured values \u200b\u200band 7d of the 100d "and" throughout the test period the test temperature should be maintained Within the tolerance range, and apply the appropriate test equipment continuous "two, because GB/T 1685-2008 is the use of non Continuous measurement device for continuous measurement of the narrative is not applicable;

--- In order to comply with the provisions of GB/T 1.1, the ozone concentration by the "pphm" to "10-8." for ease of use, this standard also made the following editorial changes.

--- Delete foreword international standards;

--- "This International Standard" by "this standard." the Standard Appendix A, Appendix B is an informative annex.

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Rubber and rubber products sealing products Standardization Technical Committee Technical Committee (SAC/TC35/SC3) Centralized.

This standard was drafted. Zhejiang Institute of Quality and Technical Supervision and Inspection, Northwest Rubber Plastic Research and Design Institute, Maanshan Grace rubber Products Co., Ltd., Maoming City Hengwei Rubber Products Co., Ltd.

1 Scope

This standard specifies the general requirements for finished seal. For additional requirements needed for special purposes should be regulated in the relevant product standard set. It should be noted. the performance and work performance seal material pipe joints, geometry and structure of the nipple ring about.

This standard applies to the following thermoplastic elastomer seal material used in pipeline.

Within a) buildings outfall (intermittent water flow, operating temperature up to 95 °C);

b) buried with drains, sewers (for continuous flow water temperature below 45 °C; intermittent water flow, operating temperature Up to 95 °C);

c) rainwater pipe.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement according to study Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 528-1998 vulcanized rubber or thermoplastic rubber tensile stress strain properties (eqv ISO 37:1994) GB/T 1685-2008 vulcanized rubber or thermoplastic rubber was measured at room temperature and high temperature compression stress relaxation GB/T 1690-1992 Test method for liquid-resistant vulcanized rubber (neq ISO 1817. 1985) GB/T 2941-2006 rubber physical test method for sample preparation combined regulate general procedures (ISO 23529:2004, IDT) GB/T 3512-2001 vulcanized rubber or thermoplastic rubber hot air and heat accelerated aging test (eqv ISO 188:1998) GB/T 3672.1-2002 rubber tolerances Part 1. Dimensional tolerances (idt ISO 3302-1:1996) GB/T 6031-1998

Determination of vulcanized rubber or thermoplastic rubber hardness (10 ~ 100IRHD) (idt ISO 48:1994) GB/T 7759-1996 vulcanized rubber, thermoplastic rubber at room temperature, high and low temperature compression set determination (Eqv ISO 815:1991) GB/T 7762-2003 vulcanized rubber or thermoplastic rubber resistant to ozone cracking static tensile test (ISO 1431-1. 1989, MOD) GB/T 17604-1998 rubber pipe joint seals manufacturing quality recommendations defect classification and category (idt ISO 9691. 1992)

3 Terms and Definitions

The following terms and definitions apply to this standard.

Does not require curing and cross-linking in the process, while at the operating temperature but having a polymeric or elastomeric properties of several polymeric Blends thereof.

NOTE: This thermoplastic elastomer at the processing temperature of the elastic disappear, so that further processing becomes possible, when the temperature was lowered to the working temperature, and restore its flexibility.

Category 4

Press material nominal hardness divided into three categories, the physical properties are shown in Table 1.3 class pipe joint seals the provisions in Table 2.