

ICS 87.060.20
CCS G 50



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

GB/T 9284-1988

Replacing GB/T 9284-1988

**Binders for paints and varnishes -- Determination of softening
point -- Part 1: Ring-and-ball method
(English Translation)**

Issued on: May 15, 2015

Implemented on: October 1, 2015

Issued by: Standardization Administration of China

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Foreword

GB/T 9284 "Paints and varnishes - Determination of softening point" is divided into two parts.

--- Part 1. Global law;

--- Part 2. Ring Cup.

This section GB/T 19284 Part of.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This Part replaces GB/T 9284-1988 "Paints and varnishes - Determination of softening point Universal Law", this part of the previous version GB/T 9284-1998 technical differences compared as follows.

--- Equivalent to using the previous version of ISO 4625. 1980, edition of modification using ISO 4625-1:2004;

--- Adds automatic ball method (see Chapter 8);

--- Changed the method for the preparation of the specimen (see Version 5.2,1988 Chapter 4);

--- Changed the classification of the softening point of the interval (see edition 7.3,1988 Chapter 5);

--- Change the precision (see Chapter 9, Chapter 71 988 Edition);

--- Increase the accuracy of the data (see Chapter 10, Chapter 8, 1988 edition).

This section uses redrafted law revision of international standards ISO 4625-1:2004 Determination of "paints and varnishes softening point Part 1. Universal Law. " Technical differences exist compared to 2004, the terms of these differences has been involved through its outer margins. This part of ISO 4625-1 A single vertical line (I) the location was marked, the list given in Appendix A corresponding technical differences and their causes.

This section also made the following editorial changes.

--- Chapter 7 7.1.1 - 7.1.4 have changed the title of the article;

--- 7.1.3 Chapter 7, heading text description of "Figure 1b";

--- Deleted the Chapter 7 7.1.6.1 ~ 7.1.6.3 of numbers to the column item;

--- Increase the informative Appendix A.

This part is proposed by the China Petroleum and Chemical Industry Association.

This part of the National Standardization Technical Committee and the pigment coating (SAC/TC5) centralized.

This section drafted by. CNOOC Changzhou Paint Chemical Research Institute Co., Ltd., Guangzhou standard laboratory equipment Geda Products Co., Ltd., North Virgin Blue Zhou corrosion protection Industrial Co., Ltd., Shenzhen Hirota Decoration Group Co., Ltd.

1 Scope

This section GB/T 9284 specifies the method for determination of the resin (including rosin), and similar materials with a softening point ring and ball method.

This section provides both manual and automatic methods.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 3186 Paints, varnishes and raw materials for paints and varnishes - Sampling (GB/T 3186-2006, ISO 15528:2000, IDT) GB/T 6379.1 measurement methods and results of Accuracy (trueness and precision) - Part 1. General principles and definitions (GB/T 6379.1-2004, ISO 5725-1:1994, IDT) IEC 60751 Industrial platinum resistance sensor

(Industrial platinum resistance thermometers sensors) ASTM E691 inter-laboratory studies to determine the accuracy of the test method procedures (Standard practice for conducting an interlaboratory study to determine the precision of a test)

3 Terms and Definitions

The following terms and definitions apply to this document.

Softening point Fixed in the ring-like level, in a water bath, glycerin bath, the silicone oil bath of ethylene glycol/water bath, or glycerol/water bath at a predetermined speed to be tested Degree heat, will determine the quality of the ball is placed on the sample filled metal rings, balls falling from the ring 25.4mm under gravity when Temperature, regarded as the softening point.

Principle 4

Resin (including rosin), and similar materials generally do not soften at a fixed temperature. As the temperature increases, the brittleness of these materials or very thick or slow-moving material gradually becomes softer and low viscosity liquids. For this reason, if the requested junction Determination of Fruit comparable softening point must use the method of fixing and strictly defined.

In these tests, the softening temperature is defined as the sample to be tested is fixed at the level of the ring, in a water bath, glycerin bath, a silicone oil bath, Glycol/water bath, or glycerol/water bath to a predetermined temperature increasing rate of 5 ° C/min heating, will determine the quality of the ball is placed to fill the sample on the metal ring, steel ball falling from the ring when the temperature of 25.4mm in gravity, regarded as the softening point.