
**Superabsorbent polymer — Sodium
polyacrylate resin for absorbing
blood —**

**Part 1:
Test methods**

*Résines super-absorbantes — Polyacrylate de sodium pour
l'absorption du sang —
Partie 1: Méthodes d'essai*

Sample Document

get full document from standards.iteh.ai



Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Test methods	2
4.1 General.....	2
4.2 Determination of amount of residual monomers.....	2
4.3 Determination of volatile content.....	3
4.4 Determination of pH.....	3
4.5 Determination of particle size distribution.....	3
4.6 Determination of bulk density.....	3
4.7 Determination of whiteness.....	3
4.8 Determination of simulated blood absorption capacity.....	3
4.8.1 General principle.....	3
4.8.2 Reagents.....	3
4.8.3 Apparatus.....	3
4.8.4 Sampling.....	3
4.8.5 Procedure.....	4
4.8.6 Calculation and expression of results.....	4
4.9 Determination of simulated blood absorption rate.....	5
4.9.1 General principle.....	5
4.9.2 Reagents.....	5
4.9.3 Apparatus.....	5
4.9.4 Sampling.....	5
4.9.5 Procedure.....	5
4.9.6 Calculation.....	6
Annex A (normative) Preparation of simulated blood	7
Annex B (informative) Comparison of human blood and simulated blood absorption capacity of SAP	9
Bibliography	10

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

A list of all parts in the ISO 19699 series can be found on the ISO website.

Introduction

The test methods described in this document have been practically used by relevant production enterprises for several years and have proven to be reliable with respect to common criteria of quality of test methods (validity, repeatability, etc.). They are applicable to testing superabsorbent polymer of sodium polyacrylate used in hygiene products (such as sanitary towels and pads) and medical products (such as tourniquets and surgery coats).

The International Organization for Standardization (ISO) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning test methods of simulated blood absorption capacity and simulated blood absorption rate given in [4.8](#) and [4.9](#).

ISO takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured ISO that he/she is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with ISO. Information may be obtained from:

Jinan Haoyue Resin Co., Ltd

Bucun District, Zhangqiu City, Shandong Province

China

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. ISO shall not be held responsible for identifying any or all such patent rights.