

INTERNATIONAL  
STANDARD

ISO  
24048

First edition  
2022-11

---

---

---

**Plastics — Determination of bound acrylonitrile content in the continuous phase of acrylonitrile-butadiene-styrene (ABS) by Dumas combustion method**

*Plastiques — Détermination de la teneur en acrylonitrile lié dans la phase continue d'acrylonitrile-butadiène-styrène (ABS) par la méthode de combustion Dumas*



Reference number  
ISO 24048:2022(E)

© ISO 2022



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

## Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>1</b>
<b>5 Reagents</b> .....	<b>1</b>
<b>6 Apparatus</b> .....	<b>2</b>
<b>7 Sampling and preparation of the specimen</b> .....	<b>3</b>
7.1 Preparation of cold methanol and settlement of centrifuge.....	3
7.2 Sample dispersion .....	3
7.3 Centrifuge separation.....	3
7.4 Precipitation of continuous phase .....	3
7.5 Centrifuge and work-up.....	3
<b>8 Procedure</b> .....	<b>4</b>
8.1 Calibration.....	4
8.1.1 General .....	4
8.1.2 Instrument set up .....	4
8.1.3 Setting up calibration curve.....	4
8.2 Measurement .....	5
8.3 Calculation.....	5
<b>9 Precision</b> .....	<b>6</b>
9.1 General.....	6
9.2 Repeatability, $r$ .....	6
9.3 Reproducibility, $R$ .....	6
<b>10 Test report</b> .....	<b>6</b>
<b>Annex A (informative) Summary of precision data</b> .....	<b>7</b>
<b>Bibliography</b> .....	<b>8</b>