

This is a preview of "ISO 12742:2020". [Click here to purchase the full version from the ANSI store.](#)

Third edition
2020-12

Copper, lead and zinc sulfide concentrates — Determination of transportable moisture limits — Flow-table method

Concentrés sulfurés de cuivre, de plomb et de zinc — Détermination des limites d'humidité transportable — Méthode de la table d'écoulement



Reference number
ISO 12742:2020(E)

© ISO 2020



COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

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
Website: www.iso.org

Published in Switzerland

This is a preview of "ISO 12742:2020". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Apparatus	2
6 Sampling and sample preparation	3
6.1 General.....	3
6.2 Laboratory sample.....	3
6.3 Sample preparation.....	4
7 Procedure	4
7.1 General.....	4
7.2 Preparation of test portions.....	4
7.2.1 General.....	4
7.2.2 Filling the mould.....	5
7.2.3 Tamping pressure.....	5
7.2.4 Tamping procedure.....	5
7.2.5 Removal of the mould.....	6
7.2.6 Dropping the flow table.....	6
7.3 Identification of the flow state.....	6
7.4 Preliminary flow moisture point.....	8
7.4.1 Preparation of test portion.....	8
7.4.2 Determination of preliminary flow moisture point.....	8
7.4.3 Addition of water for preliminary flow moisture point test.....	9
7.4.4 Treatment of sample received above the flow moisture point.....	9
7.5 Main flow moisture point determination.....	9
7.5.1 Preparation of test portions.....	9
7.5.2 Determination of main flow moisture point.....	9
7.5.3 Addition of water for main flow moisture point determination.....	9
7.6 Graphical method.....	10
7.6.1 Preparation of test portions.....	10
7.6.2 Determination of flow moisture point.....	10
7.7 Moisture determination.....	10
8 Expression of results	10
8.1 Main flow moisture point.....	10
8.2 Flow moisture point determined by the graphical method.....	11
9 Validation of main flow moisture point	11
10 Test report	11
Annex A (normative) Description of equipment used to determine TML	12
Bibliography	21

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 of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 183, *Copper, lead, zinc and nickel ores and concentrates*.

This third edition cancels and replaces the second edition (ISO 12742:2007), which has been technically revised. The main changes to the previous edition are as follows:

- [Clause 3](#), 'Terms and definitions', added.
- [6.2](#): reference to [7.4.4](#) for partial drying in event that sample received above transportable moisture limit (TML) added.
- [Clause 6](#): reference to ISO 12743 sampling procedures added.
- [7.3](#): description of the flow state changed for clarity.
- [7.4.2](#): permission to deviate from the sample mass requirements of ISO 10251 for moisture determination added.
- [7.4.4](#): procedure for partial drying of sample received above TML added.
- [7.6.1](#): inclusion of data points with greater than 12 mm displacements in the graphical method provided that the points fall on the linear portion of the graph.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This is a preview of "ISO 12742:2020". [Click here to purchase the full version from the ANSI store.](#)

Introduction

The first edition of this document was published in 2000 as a guidance document because there had been insufficient test programme participants to allow precision data to be derived.

The second edition included the addition of the graphical method for determination of the flow point as a means of validating the bracket method. This version has been revised to make it easier to understand and follow.