## Draft Jamaican Standard

Code of Practice

for

## Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings



**BUREAU OF STANDARDS JAMAICA** 

# **NON-OBJECTION PERIOD:**

# **17 SEPTEMBER 2023 – 16 OCTOBER 2023**

BAHIMAN

#### **IMPORTANT NOTICE**

Jamaican standards are subjected to periodic review. The next amendment will be sent without charge if you cut along the dotted line and return the self-addressed label. If we do not receive this label we have no record that you wish to be kept up-to-date. Our address:

Bureau of Standards Jamaica 6 Winchester Road P.O. Box 113 Kingston 10 Jamaica W.I.

\_\_\_\_\_

-----(cut along the line) -----

NAME OR DESIGNATION
ADDRESS

#### JBS CERTIFICATION MARK PROGRAMME

The general policies of the JBS Certification Mark Programme are as follows:

- The JBS provides certification services for manufacturers participating in the programme and licensed to use the gazetted JBS Certification Marks to indicate conformity with Jamaican Standards.
- Where feasible, programmes will be developed to meet special requirements of the submitter. Where applicable, certification may form the basis for acceptance by inspection authorities responsible for enforcement of regulations.
- In performing its functions in accordance with its policies, JBS will not assume or undertake any responsibility of the manufacturer or any other party.

Participants in the programme should note that in the event of failure to resolve an issue arising from interpretation of requirements, there is a formal appeal procedure.

Further information concerning the details of the JBS Certification Mark Programme may be obtained from the Bureau of Standards, 6 Winchester Road, Kingston 10.

### **CERTIFICATION MARKS**





Certification of Agricultural Produce (CAP) Mark



Plant Certification Mark



Jamaica-Made Mark

**Draft Jamaican Standard** 

## **Code of Practice**

for

Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings

Bureau of Standards Jamaica 6 Winchester Road P.O. Box 113 Kingston 10 Jamaica W. I. Tel: (876) 926 -3140-5, (876) 618 – 1534 or (876) 632-4275 Fax: (876) 929 -4736 E-mail: <u>info@bsj.org.jm</u> Website: <u>www.bsj.org.jm</u>

Month 202X

#### © 202X Bureau of Standards Jamaica

All rights reserved. Unless otherwise specified, no part of a Bureau of Standards publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including, photocopying microfilm or scanning, without permission in writing.

#### ISBN XXX.XXXX.XXX

Declared by the Bureau of Standards to be a standard Code of Practice pursuant to section 7 of the Standards Act 1969.

#### **First published Month 202X**

This standard was circulated in draft form for thirty (30) days non-objection under the reference DJS ASTM D3960-05 (Reapproved 2018): 2023.

Jamaican Standards establish requirements in relation to commodities, processes and practices, but do not purport to include all the necessary provisions of a contract.

The attention of those using this specification is called to the necessity of complying with any relevant legislation.

No.	Date of Issue	Remarks	Entered by and date

#### Amendments

### Contents

	Page
National foreword	ii
Committee representation	iii
Acknowledgement	iii
1.Scope 2. Referenced Documents	1
2. Referenced Documents	1
3.Terminology	1
4. Summary of Practice	2
5. Significance and Use	2
6. Nonvolatile and Volatile Content	2
7. Water Content	3
8. Density	4
9. Exempt Volatile Compounds	
10. Calculation of VOC Content	5
11. Keywords	6

#### Appenixes

<ul><li>X1. Automotive coatings suppliers round robin</li><li>X2. Calculation of voc content (section 10)</li></ul>	
X3. Definition of volatile organic compounds (voc)	
AFT 3'	

#### National foreword

This standard is an adoption and is identical to D3960-05(Reapproved 2018) Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings published by ASTM International (ASTM).

Scope of the standard

1.1 This practice measures the volatile organic compound (VOC) content of solventborne and waterborne paints and related coatings as determined from the quantity of material released from a sample under specified bake conditions and subtracting exempt volatile compounds and water if present.

NOTE 1 - The regulatory definition, under the control of the U.S. EPA, can change. To ensure currency, contact the local air pollution control agency.

1.2 This practice provides a guide to the selection of appropriate ASTM test methods for the determination of VOC content.

1.3 Certain organic compounds that may be released under the specified bake conditions are not counted toward coating VOC content because they do not participate appreciably in atmospheric photochemical reactions. Such negligibly photochemically reactive compounds are referred to, as exempt volatile compounds in this practice.

NOTE 2 - Information on the US EPA definition of VOC and a list of the current US EPA approved exempt volatile compounds which have been used in coatings, are provided in Appendix X3.

1.4 VOC content is calculated as a function of (1) the volume of coating less water and exempt volatile compounds, and (2) the volume of coating solids, and (3) the weight of coating solids.

1.5 The values stated in SI units are to be regarded as standard.

1.6 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.

1.7 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

Where the words 'International Standard' appear, referring to this standard, they should be read as 'Jamaican Standard'.

Where reference is made to informative and normative annexes the following definitions should be noted:

- Informative Annex gives additional information intended to assist in the understanding or use of the document. They do not contain requirements.
- Normative Annex gives provisions additional to those in the body of a document. They contain requirements.

Users should note that all standards undergo revision from time to time and that any reference made herein to any standard implies its latest edition, unless otherwise stated.

This standard is voluntary.

#### **Committee representation**

The preparation of this standard for the Standards Council, established under the Standards Act of 1969, was carried out under the supervision of the Paints and Surface Coatings Technical Committee which at the time comprised the following members:

#### Acknowledgment

Acknowledgement is made to ASTM International (ASTM) for permission to adopt D3960-05 (Reapproved 2018).