# Draft Jamaican Standard

Specification

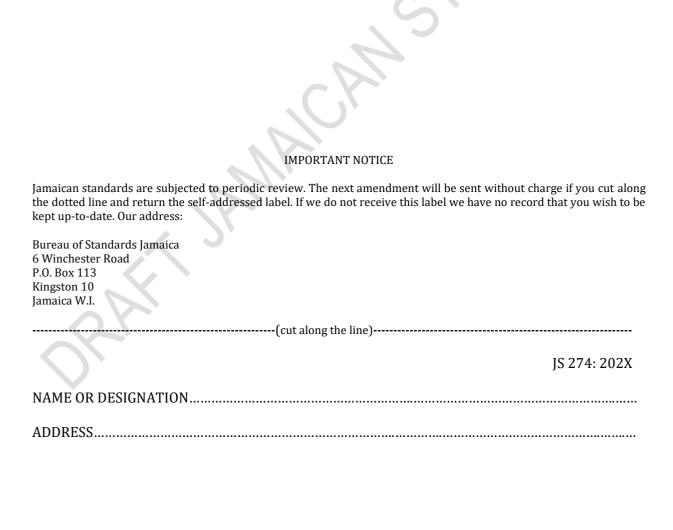
for

Varnish: general purpose, interior gloss and satin



# **BUREAU OF STANDARDS JAMAICA**

COMMENT PERIOD: 28 JANUARY 2024 – 27 MARCH 2024 DRAFT JAMARCAN STANDARD



## 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 submittor.
- JBS certification is provided in the interest of maintaining agreed-upon standard requirements. 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 does not assume or undertake to discharge 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 JBS Certification Mark Programme may be obtained from the Jamaica Bureau of Standards, 6 Winchester Road, Kingston 10.

## **CERTIFICATION MARKS**



**Product Certification Marks** 



**Plant Certification Mark** 



Certification of Agricultural Produce (CAP) Mark



Jamaica-Made Mark

# **Draft Jamaican Standard**

**Specification** 

for

Varnish: general purpose, interior gloss and satin

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Declared by the Bureau of Standards to be a standard specification pursuant to section 7 of the Standards Act 1968.

First published May 2000

This standard was circulated in the draft form for comment under the reference DJS 274: 2024.

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 standard specification is called to the necessity of complying with any relevant legislation.

No. Date of Issue Remarks Entered by and date

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#### **Foreword**

This standard was prepared to provide guidelines for manufacturers as well as users of varnish. The standard specifics performance requirements as well as general and detailed physical requirements for general purpose varnish for interior use.

This standard is voluntary.

#### **Committee representation**

The preparation of this standard for the Standards Council established under the Standards Act 1968, 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 the International Organization for Standardization (ISO) and ASTM International (ASTM) for permission to reproduce material from their standards.

#### **Related documents**

This standard makes reference to the following:

- a) JS 349:2020 Jamaican Standard Specification for the labelling of goods: General requirements
- b) JS 1 Part 23: 1993 (Affirmed 2017) Jamaican Standard Specification for the labelling of Commodities Part 23: Labelling of finishes
- c) JS 350: 2020 Jamaican Standard Specification for the labelling of goods: Specific requirements for prepackaged goods
- d) ISO 554: 1976 Standard atmospheres for conditioning and /or testing- Specifications
- e) ASTM D523-14 (2018) Standard Test Method for Specular Gloss
- f) IS 525 Specification for varnish, finishing interior

# Jamaican standard specification for varnish: general purpose, interior gloss and satin

# 1. Scope

- **1.1** This standard establishes requirements for polyurethane varnishes for general interior use on wooden products including floors.
- **1.2** The varnishes covered by this standard shall be oleoresinous with a medium-length alkyd resin together with the necessary thinners and dryers.

#### 2. Terms and definitions

For the purpose of this standard the following definition applies:

# 2.1 alkyd resin

synthetic resin resulting from the polycondensation of polyacids and fatty acids (or oils) with polyhydric alcohols

# 2.2 coating material

A product, in liquid, paste or powder form, that, when applied to a surface, forms a layer possessing protective, decorative and/or other specific properties

#### 2.3 oleoresinous

Liquid portion of a paint (coating material) consisting of drying oils and resins

#### 2.4 sagging

Downward movement of a coating material during application and or drying in a vertical or an inclined position that results in irregularities in the dry coat

Note 1 to entry: Unwanted accumulation at the edge of a surface is called a fat edge.

#### 2.5 skinning

Insoluble film formed on a coating material in the container

#### 2.6 thinning

Reduction of the viscosity or consistency of a coating material using a solvent or diluent

#### 2.7 undissolved matter

Finely distributed solid particles spread throughout a liquid coating material

# 2.8 varnish

liquid composition converted to a transparent or translucent solid film after application as a thin layer

Note 1 to entry: Varnish typically consists of resins dissolved in oil or solvents and is used as a finish or coating. Lacquer, polyurethane, and shellac are examples of varnish.

#### 3. Classification

The varnishes shall be supplied in two types as specified by the purchaser:

- (a) Type l gloss
- (b) Type 2 satin

# 4. General requirements

- **4.1** Varnishes shall be supplied in a condition suitable for brushing and shall be satisfactory for spraying when reduced with a thinner recommended by the manufacturer. They shall be clear, transparent and free from skinning and undissolved matter.
- **4.2** When stored in the original unopened container at temperatures ranging between 5°C and 37°C for one year from date of manufacture, varnishes shall not thicken or skin excessively and shall meet the requirements for applicability and appearance detailed in **5.13**.
- **4.3** For at least one year from the date of manufacture, the containers in which varnishes are supplied shall show no sign of deterioration or rust except around the rims where a small amount of rust is permissible.

# **5.** Detailed requirements

Varnishes made to this standard shall comply with the following:

		Minimum	Maximum
5.1	Viscosity at 25°C, Centipoise (cP)	12/-	400
5.2	Drying time, hours		
	- Touch dry	-	8
	- Dry hard	-	24
5.3	Gloss, units at 60°C		
	- Type 1	80	-
	- Type 2	20	40
5.4	Flash point, closed cup		
	- °C	35	-
5.5	Volatile Matter, %	-	55
5.6	Volatile Organic Content (VOC), g/l	-	450

**5.7 Gloss on recoat**. After recoat, the resultant film shall be of uniform gloss.

5.7

- **5.8 Skinning properties**. Varnishes shall show no evidence of skin formation when tested in accordance with relevant accepted test method standard.
- **5.9 Flexibility**. A film of varnish prepared and tested in accordance with relevant accepted test method standard. The film shall not crack or peel when subjected to the bending test using a 3.2 mm diameter mandrel.
- **5.10 Water resistance**. A film of varnish prepared and tested in accordance with relevant accepted test method standard and allowed to dry for 48 h at 27°C ± 2°C without blistering, lifting, peeling or wrinkling. After subsequent drying for 2 h, the film shall show no wrinkling, dulling, softening, loss of adhesion or other visual defect.
- **5.11 Scratch resistance**. A film of varnish tested in accordance with relevant accepted test method standard. The film shall not scratch so as to show the test panel.
- **5.12 Scrubbability.** A film of varnish prepared and tested in accordance with relevant accepted test method standard and allowed to dry for 7 days shall be able to withstand 500 cycles of scrubbing. In Type I there shall be a change in gloss of not more than 60 units.

## **5.13** Applicability and appearance

- **5.13.1 Brushing.** The varnish shall have suitable consistency and good brushing properties. The dried film shall show no ridges, sagging, brush marks or coarse particles and shall be uniform in appearance and gloss.
- **5.13.2 Spraying.** When the varnish is applied by spraying after reduction with a thinner as recommended by the manufacturer, it shall display good spraying properties. The dried film shall show no sagging.
- **5.14** Varnishes shall have no objectionable odour during or after application and shall have satisfactory recoat and drying time as detailed in **5.2** and **5.7**. There shall be no lifting, wrinkling, lack of uniformity of other visible defects.

# 6. Preparation for delivery

- **6.1** Commercial packaging, packing and marking shall be done in accordance with standard practice within the manufacturing industry.
- **6.2** Labelling of containers with varnish shall be done in accordance with the requirements as detailed in JS1 Part 23, JS 349 and JS 350.
- **6.3** In addition to the requirements detailed in 6.1 and 6.2, each label shall carry the following information:
  - (a) manufacturer's name and identifiable address;
  - (b) date of minimum durability;
  - (c) thinning instructions; and
  - (d) type of varnish

# 7. Patent

The unique formula for the product(s) shall be exempted from the listing of ingredients to protect the intellectual property of paint companies once the ingredients do not pose a significant public health and safety risk.

END OF DOCUMENT

#### **Standards Council**

The Standards Council is the controlling body of the Bureau of Standards Jamaica and is responsible for the policy and general administration of the Bureau.

The Council is appointed by the Minister in the manner provided for in the Standards Act, 1969. Using its powers in the Standards Act, the Council appoints committees for specified purposes.

The Standards Act, 1969 sets out the duties of the Council and the steps to be followed for the formulation of a standard.

#### 1. Preparation of standards documents

The following is an outline of the procedure which must be followed in the preparation of documents:

- 2. The preparation of standards documents is undertaken upon the Standard Council's authorisation. This may arise out of representation from national organisations or existing Bureau of Standards' Committees of Bureau staff. If the project is approved it is referred to the appropriate sectional committee or if none exists a new committee is formed, or the project is allotted to the Bureau's staff.
- 3. If necessary, when the final draft of a standard is ready, the Council authorises an approach to the Minister in order to obtain the formal concurrence of any other Minister who may be responsible for any area which the standard may affect.
- 4. The draft document is made available to the general public for comments. All interested parties, by means of a notice in the Press, are invited to comment. In addition, copies are forwarded to those known, interested in the subject.
- The Committee considers all the comments received and recommends a final document to the Standards Council
- 6. The Standards Council recommends the document to the Minister for publication.
- 7. The Minister approves the recommendation of the Standards Council.
- 8. The declaration of the standard is gazetted and copies placed on sale.
- 9. On the recommendation of the Standards Council the Minister may declare a standard compulsory.
- Amendments to and revisions of standards normally require the same procedure as is applied to the preparation of the original standard.

#### 11. Overseas standards documents

The Bureau of Standards Jamaica maintains a reference library which includes the standards of many overseas standards organisations. These standards can be inspected upon request.

The Bureau can supply on demand copies of standards produced by some national standards bodies and is the agency for the sale of standards produced by the International Organization for Standardization (ISO) members. Application to use the reference library and to purchase Jamaican and other standards documents should be

addressed to: Bureau of Standards Jamaica

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