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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Seedlac — Specification**MODIFICATION TO FOREWORD** (*Inside front cover*)

The ISO member body for the United Kingdom has withdrawn its approval of this International Standard. The United Kingdom should therefore be indicated as having disapproved the document.

INTERNATIONAL STANDARD



55

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Seedlac — Specification

Gomme laque en grains — Spécification

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 55 was developed by Technical Committee ISO/TC 50, *Lac*, and was circulated to the member bodies in February 1976.

It has been approved by the member bodies of the following countries :

Austria	Mexico	Thailand
Czechoslovakia	Netherlands	Turkey
Egypt, Arab Rep. of	Romania	United Kingdom
India	Sweden	

No member body expressed disapproval of the document.

This International Standard cancels and replaces ISO Recommendation R 55-1957, of which it constitutes a technical revision.

Acknowledgement is due for the assistance that has been derived from the specifications and publications of the American Society for Testing and Materials, the American Bleached Shellac Manufacturer's Association, the United States Shellac Importer's Association, the British Standards Institution, the Agricultural Marketing Adviser to the Government of India, Messrs. Angelo Brothers, Ltd., Calcutta, and the Indian Lac Research Institute. Considerable assistance has been derived also from *A Handbook of Shellac Analysis*, by M. Rangaswami and H. K. Sen, issued by the Indian Lac Research Institute.

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Seedlac — Specification

0 INTRODUCTION

0.1 The usual trade descriptions of seedlac are based on the Indian names of the host trees, the season of cropping the sticklac, visual differences or a combination of any of these. The use of these grade designations led to confusion and some marketing difficulties. When ISO/R 55 was prepared in 1957, it was decided to adopt only seven grades which were independent of the names of host trees or seasons. However, the expectation that the ISO grades for seedlac would be increasingly adopted in trade and ultimately replace the traditional grade designations has not come about. A new system has therefore been adopted in this International Standard so that seedlac can now be completely identified by a combination of the ISO grade and the trade grade. In this revision, it has been found possible to reduce the number of ISO grades from seven to five.

0.2 For matter insoluble in hot alcohol, two limits are prescribed, in line with trade practice : a basic limit and a relaxed limit. The relaxed limit shall be the limit for rejection.

0.3 The requirement for non-volatile matter soluble in cold alcohol has not been retained as this requirement is applied in practice to waste products of lac only.

0.4 One of the requirements for seedlac, namely that for matter insoluble in hot alcohol, is included in this International Standard as an essential clause. The remainder, namely those for volatile matter (moisture), colour, bleach index and bleachability, matter soluble in water, wax and ash, are optional.

0.5 For determination of bleach index and bleachability, two methods are practised. One has been developed in India and the other in the U.S.A. The method to be followed for the determination of bleach index and bleachability shall be subject to agreement between the purchaser and the supplier.

0.6 For the purpose of deciding whether a particular requirement of this International Standard is complied with, it is necessary for the final value, observed or calculated, expressing the result of test or analysis to be rounded off to the same number of places as that in the specified value, it being always understood that the analyst will carry out his determination to at least one place more than in the specified value.

1 SCOPE AND FIELD OF APPLICATION

1.1 This International Standard specifies requirements and methods of test for seedlac.

1.2 This International Standard is intended chiefly to cover the technical provisions for guiding the purchase of the material, but does not include all the necessary provisions of a contract.

1.3 The limits specified in this International Standard are limits for rejection (see 0.2).

2 DEFINITIONS

For the purposes of this International Standard, the following definitions apply :

2.1 sticklac : The natural product of lac insects.

2.2 seedlac : The product obtained by washing crushed sticklac.

2.3 approved sample : The sample agreed upon between the purchaser and the vendor as the standard for colour and appearance.

3 FORM AND CONDITION

The form and condition of seedlac are subject to agreement between the purchaser and the supplier.

4 GRADES

Five grades of seedlac, namely Special, A, B, C and D are specified. Further, if required by the purchaser, the names of the grades as prevalent in trade shall be indicated in addition, in parentheses, as shown below :

- Grade Special (Golden Kusmi);
- Grade B (Kusmi No. 2).

The correspondence between ISO grades and trade grades is shown in table 1.

TABLE 1

ISO grade	Trade grade
Special	i) Golden Kusmi
	ii) Golden Bysacki
	iii) Grade I, Class A
A	i) Kusmi No. 1
	ii) Grade II, Class A
B	i) Kusmi No. 2
	ii) Manbhum Fine Bysacki
	iii) Grade I, Class B
C	i) Fine Bysacki
	ii) Grade II, Class B
D	i) Ordinary Bysacki

5 MANDATORY REQUIREMENT

Matter insoluble in hot alcohol

Seedlac shall not contain more than the basic limits of matter insoluble in hot alcohol specified in table 2, when determined by either of the methods described in annex A, as agreed between the purchaser and the supplier. By agreement between the purchaser and the supplier, the basic limit may be relaxed but it shall not in any case exceed the relaxed limit as shown in table 2.

TABLE 2

Grade	Basic limit % (m/m)	Relaxed limit % (m/m)
Special	2,0	3,0
A	3,0	4,0
B	3,0	4,0
C	3,0	5,0
D	5,0	7,0

6 OPTIONAL REQUIREMENTS

6.1 Volatile matter (moisture)

Seedlac shall not contain more than 2,5 % (m/m) of volatile matter (moisture) as determined by the method described in annex B.

6.2 Colour index

The colour index of seedlac, as determined by the method described in annex C, shall not exceed the limits given in table 3.

TABLE 3

Grade	Colour index (maximum)
Special	8
A	10
B	12
C	18
D	30

Alternatively, the appearance and colour of seedlac shall not be inferior to those of an approved sample when judged by visual examination.

6.3 Bleach index and bleachability

The bleach index of seedlac shall be determined or the bleachability test for seedlac shall be carried out, if either is agreed between the purchaser and the supplier, in accordance with such methods as may be agreed between them (see 0.5).

6.4 Matter soluble in water

Seedlac shall not contain more than 1 % (m/m) of matter soluble in water, and the aqueous extract shall be neutral to methyl red. Matter soluble in water shall be determined by the method described in annex D.

6.5 Ash

The limits and methods of test for ash content of seedlac shall be subject to agreement between the purchaser and the supplier.

6.6 Wax

Seedlac shall not contain more than 5,5 % (m/m) of wax when determined by the method described in annex E.

7 SAMPLING

Samples shall be taken in the manner described in annex F.