
**Textiles — Determination of index
ingredient from coloured textile —**

**Part 5:
Lac**

*Textiles — Détermination d'indicateurs d'ingrédients de textiles
colorés —*

Partie 5: Gomme-Laque



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Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Reagents	2
6 Apparatus	2
7 Procedure	2
7.1 Standard preparation.....	2
7.2 Preparation of specimen.....	2
7.3 Analysis.....	3
7.4 Qualification of laccaic acid C.....	3
8 Test report	3
Annex A (informative) Example of test result	4

Foreword

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This document was prepared by Technical Committee ISO/TC 38, *Textiles*.

A list of all parts in the ISO 22195 series can be found on the ISO website.

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.

Introduction

There is no doubt that dyeing plays the most important role in expressing the colour of clothes. Until the invention of synthetic dyes capable of expressing diverse colours today, humankind used materials obtained from nature to dye fabric. Typically, colourants were obtained from plants or various materials were extracted from minerals or insects. Dyeing fabrics using materials derived from these natural substances made it necessary to identify which substances the colourant was derived from. In other words, there has been a demand to confirm whether a fabric has been dyed with a natural substance.

There are several natural dyes raw material which give similar colour tone, they have different colouring molecule and the precise colorant. But each has different environmental profile which decided Environment impact of dyestuff. Textile dyed with natural dyes is claimed for environmental benefit mainly. Identification of dye helps in knowing and verifying the claims, that will help environment to get benefit exactly in the way it is claimed with textile.

This leads to the development of a test method to determine the type of natural substances used.

Textiles — Determination of index ingredient from coloured textile —

Part 5: Lac

1 Scope

This document specifies a test method which identifies the index ingredient chemical included in coloured fabric with lac. Lac can be applied to both natural fibre and man-made fibre.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1 lac

scarlet resinous secretion of a number of species of lac insects, of which the most commonly cultivated is *Kerria lacca*

Note 1 to entry: Lac is the common name of insect *Kerria lacca*. Thousands of lac insects colonize the branches of the host trees and secrete the resinous pigment. The coated branches of the host trees are cut and harvested as stick lac. This stick contains shellac. The spend of shellac extract is used for extraction of lac colorant.

3.2 coloured

expressing of colours to textiles by dyeing, printing or coating

3.3 natural colourant

materials obtained from plants, wood, rocks, soil, insects or any other thing existing on earth without any chemical reaction adopted before colouring of textiles

4 Principle

The identification of natural colorant is very important in the scientific examination of the colouring sources of textiles, coloured print paintings, illuminated manuscripts and other works where natural colorants are used. Natural colorants are usually composed of several phytochemicals. Each colorant