

Policy for GMO Screening of Organic Cotton

Genetically modified organisms (GMOs) are not compatible with the principles and practice of organic production and processing and are, therefore, **not permitted** within the Organic Content Standard (OCS), aside from the non-organic component of OCS Blended products.

However, Textile Exchange recognizes that organic production does not exist in a vacuum and even the most stringent and diligent processes and procedures cannot always guarantee the complete absence of GMO material in organic supply chains.

The Organic Content Standard (OCS) certification is based on organic material content claims, and while Textile Exchange expects all reasonable steps to be taken to eliminate GMOs from textile supply chains, farmers and operators should not be penalized due to factors outside of their control. For example, if all aspects of the organic crop production and handling processes are followed correctly by a certified farmer or farm group (which includes not using GMO seed), then the presence of a detectable residue from GMOs alone should not disqualify the cotton from obtaining organic status.

However, it is vital that the reason for any presence of GMOs is investigated, understood, and appropriate actions are taken. As part of this protocol, Textile Exchange requires all certification bodies to gather and report data on GMO detections to fully understand the extent and causes of contamination and to potentially use the data to inform a threshold limit in the future. Any limit will aim to be as close to zero as is technically feasible, taking into account factors outside the reach of the organic control system. Data collection will also help Textile Exchange identify any other effective interventions on this issue.

This policy addresses criteria for the GMO testing of organic cotton and is effective August 30, 2021. It is mandatory for all audits conducted or transaction certificates issued on or after December 1, 2021. The previous version of this policy was effective October 1, 2019.



Section A - Testing Criteria

A1. Testing Criteria at Cotton Gins (First Processor)

- A1.1** Seed cotton shall be tested for GMO presence at all OCS certified sites or subcontractors which are conducting ginning (PR0013¹), referred to in this policy as “gins”.
- A1.2** Samples of seed cotton shall be collected for GMO testing as follows:
- A1.2.1** Regardless of who collects samples, the sampling protocol in A4 shall be followed.
 - A1.2.2** One sample shall be collected per incoming transaction certificate **or** one sample per outgoing transaction certificate.
 - A1.2.3** The certification body shall collect at least one sample per year at each gin for GMO testing. This sample shall be collected on-site during the applicable cotton harvest and processing season (e.g. November through May in India), and may be collected during the audit.
 - A1.2.4** Remaining samples should be collected by the certification body or another third-party, but may be collected by the gin or by the certified organization for subcontracted gins.
- A1.3** GMO testing shall be conducted on all samples of seed/lint cotton collected under A1.2 using the protocol identified in A5.
- A1.4** In case of a positive GMO test result on seed/lint cotton, the certification body shall follow the protocol outlined in [Section B](#) of this policy. The certification body shall retain and collate data from GMO testing (see A1.2) at the gin and shall submit this information to Textile Exchange using *OCS-504 OCS GMO Policy Data Template*. Data shall be submitted no later than the 15th of the following month after test results are received to Assurance@TextileExchange.org.

NOTE: This data will be used as part of Textile Exchange research to determine a suitable contamination threshold in cases where contamination is unintended, inadvertent, or technically unavoidable. Such data will always remain confidential and is not for public or other stakeholder consumption.

¹ [ASR-213-V1.1 Materials, Processes, and Products Classification](#)



A2. Testing Criteria at Other OCS Sites

A2.1 When cotton – which has already been through one or more textile processing steps – is accepted as an OCS input based on an equivalency granted by Textile Exchange (see [ASR-106 Accepted Equivalent Standards](#)), one of the following two options shall apply:

A2.1.1 The incoming cotton shall be accompanied by one or more GMO test reports along with the transaction certificate from the standard which has full equivalency with the OCS. In case of a positive GMO test result referenced on the report, documentation that [Section B](#) has been followed shall be included. The certification body shall share the test report with Textile Exchange on request. Or

A2.1.2 The certification body or certified organization shall collect a sample and arrange for a GMO test on the cotton. This option is only available for cotton which has not been chemically processed or mixed with non-OCS cotton.

A2.2 The certification body may collect a sample and arrange for a GMO test on cotton at any site which handles cotton which has not been chemically processed or mixed with non-OCS cotton. This should be done if the certification body believes that there is a substantial risk of volume substitution of non-chemically processed organic cotton at a site following the gin.

A2.3 Sampling shall be conducted following the protocol in A4. GMO testing shall be conducted following the protocol in A5.

A2.4 In case of a positive GMO test result on cotton, the certification body shall follow the protocol outlined in [Section B](#) of this policy.

A2.5 The certification body shall retain and collate data from GMO testing as per A2 and shall submit this information to Textile Exchange using *OCS-504 OCS GMO Policy Data Template*. Data shall be submitted no later than the 15th of the following month after test results are received to Assurance@TextileExchange.org.

A3. Issuing of Transaction Certificates (TCs)

A3.1 The certification body shall not issue a transaction certificate to a site for a lot of OCS cotton if any of the following applies:

A3.1.1 GMO testing has been conducted on the lot and results have not been received;



A3.1.2 A positive GMO testing result was received for the lot and the investigation (see [Section B](#)) has not yet been completed; or

A3.1.3 An investigation into a positive GMO testing result has resulted in a decision to reject the lot.

A4. Sampling Protocol

A4.1 Sampling shall be conducted using one of the methods² outlined in the table below, as applicable to the material. Section 4 of *ISO 1130:1975 Textile fibers – Some methods of sampling for testing* may be used instead of the protocol in this section. This applies regardless of who is collecting the sample.

Reference	Product / Material	Lot Size	Sampling Method
1	Raw Cotton	< 5 kg	Random selection of about 100 tufts
2	Raw Cotton	> 5 kg	Divide into equal portions and then randomly select an equal number of tufts from each portion, totaling at least 100 tufts
3	Cotton Bale (Lint cotton)	Single bale, open	Random selection of 10 tufts from each of 10 equally spaced layers
4	Cotton Bale (Lint cotton)	Single bale, not open	Going down vertically, pull tufts from all sides of the bale, totaling about 50 g. Avoid soiled cotton.
5	Cotton Bale (Lint cotton)	2-10 bales	Select about 100 tufts from the lot covering all bales, from random locations. Avoid soiled cotton.
6	Cotton Bale (Lint cotton)	> 10 bales	Randomly select 10% of the total number of bales (minimum 10 bales). Select about 100 tufts from the lot covering selected bales, from random locations. Avoid soiled cotton.

² Adapted from ISO 1130:1975.



Reference	Product / Material	Lot Size	Sampling Method
7	Sliver or Roving	< 4 packages or cans	Draw equal lengths from each (draw from different areas of the package).
8	Sliver or Roving	> 4 packages or cans	Randomly select 4 packages and draw equal lengths from each (draw from different areas of the package).
9	Yarn	< 4 packages or cans or cones	Draw equal lengths from each (draw from different areas of the package).
10	Yarn	> 4 packages or cans or cones	Randomly select 4 packages and draw equal lengths from each (draw from different areas of the package).
11	Fabric or Garment	-	Take about 5 specimens from different areas of the fabric about 3 cm x 3 cm. Submitted sample of fabric should be representative of the bulk and should be at least 0.5 m in full width.

A4.2 Tufts collected as part of the sampling shall weigh between approximately 0.25 g and 0.5 g.

A4.3 The total weight per sample shall be a minimum of 25 g and should be a maximum of 50 g.

A5. Testing Protocol

A5.1 All GMO testing of cotton shall be done using *ISO IWA 32:2019 Screening of genetically modified organisms (GMOs) in cotton and textiles*.

A5.2 Testing shall be performed by appropriately qualified testing laboratories which have been confirmed to have the necessary competence and are listed in [OCS-206 Global](#)



ISO IWA 32:2019 Proficiency Test Initiative, and which hold a valid accreditation to *ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories* with a scope for the screening of GMO cotton. The laboratory is not required to be independent from the certification body. The certification body shall verify the qualification of the laboratory before accepting any test result.

A5.3 GMO testing shall not be conducted for the following materials under this policy:

A5.3.1 Cotton which has been chemically processed;

A5.3.2 Cotton which has been blended with non-OCS cotton; and

A5.3.3 Materials other than cotton.

Section B - Protocol for Positive Test Results

B1. Protocol for Positive Test Results for GMO Presence in OCS Certified Gins

B1.1 If testing detects the presence of GMOs, the certification body shall conduct an investigation to assess the source of the GMO detected, with the following possible conclusions:

B1.1.1 Intentional use of GMOs/fraudulent declaration of organic product;

B1.1.2 Systemic issues at the farm (e.g. inadequate buffer zones to prevent genetic drift, inadequate procedures to prevent comingling with non-organic product in storage);

B1.1.3 Systemic issues at the gin or other site (e.g. inadequate procedures to prevent comingling with non-organic product in storage);

B1.1.4 Unavoidable GMO contamination of organic cotton crop at farm; or

B1.1.5 No conclusion possible due to the farm not cooperating with the investigation.

B1.2 In the case of conclusions B1.1.1 or B1.1.5, the certification body shall make a decision to reject the lot of cotton for OCS certification. The certification body shall not issue a transaction certificate for this material. If the gin is involved in fraudulent activity, a critical non-conformity shall be issued.



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- B1.3** In the case of conclusion B1.1.2, the certification body shall inform the farm (either directly or via the gin) of the identified gaps.
- B1.4** In the case of conclusion B1.1.3, the certification body shall issue a major non-conformity to the gin relating to the systemic issues.
- B1.5** In the case of conclusions B1.1.1, B1.1.2, or B1.1.5, the certification body should report its findings to the appropriate national organic authority and to the farm's organic certification body.
- B1.6** The certification body may issue additional sanctions as it considers appropriate.
- B1.7** In all cases, the certification body shall report the findings of its investigation to Textile Exchange immediately by email to Assurance@TextileExchange.org, including the following information:
 - B1.7.1** The identification of the gin;
 - B1.7.2** The test report (under ISO IWA 32:2019 and GMO contamination test report, if available);
 - B1.7.3** The identification and scope certificate number of the farm;
 - B1.7.4** The transaction certificate number from the farm to the gin;
 - B1.7.5** The conclusion of the investigation; and
 - B1.7.6** The sanctions or corrective measures taken.



Appendix A – GMO Testing Flow Diagram (Informative)

