# Fluor test protocol for IBU Events

(version 2026-27.1, published in October 2026)

Scope: IBU World Cup, IBU Cup, WCH, OECH, OWG

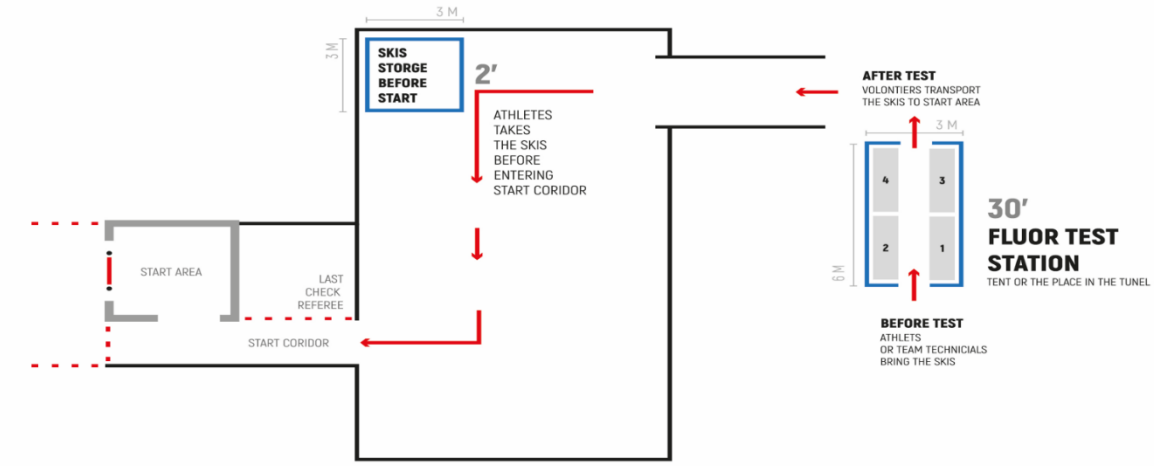
**Implementation of the full fluor ban**

The International Biathlon Union (IBU) decided to implement a full ban of ski preparation products containing fluorocarbons at all its event series from the 2023/2024 season onwards. For the IBU WC, WCH, IBU Cup, OECH and OWG the fluor ban is implemented by testing all the skis for the use of banned products.

It is the responsibility of competitors and team staff to participate at an IBU event only with material in compliance with the pertinent IBU rules (ECR 1.5.2).

**Fluor test station**

All competition skis need to be tested prior to the competition (ECR 4.2.2.1.d). The process will happen in the **Ski Test station** which will be located close to the start area (tunnel, double containers, garage or another dedicated place). Appropriate space of at least 36 m² must be available.




The place needs to be organized with 4 separate stations, each equipped by dedicated device (Bruker Alpha II) on slider system connected with separate computer. Only authorized persons may be present there.

The process will be coordinated (led and supervised by) by the IBU responsible person or IBU referee in cooperation with 6 operators provided by the OC and trained in all aspects of ski scanning and FTIR operation.

Opening hours:

The ski test station will be open at the dedicated time during training and competition days. The possibility of testing skis and checking the products will be possible at scheduled times which will be communicated in Competition daily schedule. On the Competition Day the station will be open mainly to check the skis before and after race according to plan:

1h before the start – Ski test station checked (Operators and devices ready for check before start)
45 min before the Start – Ski test Station open
30 min before the Start – latest time for delivering the ski before the dedicated Start time (individual Athlete start time)

**Ski marking and delivery time**
Skis must be delivered to the control station latest 30 minutes before the athlete's individual start time (either by the athlete or team staff) and placed in the dedicated ski stand at the test station. According to ECR 4.2.2. it is the competitor's and team staff's responsibility to undergo the material control before the start in due time.
Skis need to be delivered, marked by a sticker with the bib number of the athlete on.
Stickers will be handed out before the race in a separate envelope. Technicians are responsible for attaching the appropriate sticker to the skis on a vertical position in the area behind the binding.
Ski surface needs to be cleaned from all sides to reduce contamination risk.

**Test and results**
At least one ski from each pair will be tested by FTIR methods to exclude unauthorized material containing fluorocarbons. Ski will be tested in 3 randomly chosen points on the ski base according test procedure.

If the ski passes the control successfully, skis will be carefully transported by volunteers in ski holders or directly placed in a dedicated ski stand close to start area, depending on the location of the test station (ECR 4.2.2.2). Skis must be in the "Start" ski stand at least 5 minutes before the start of the respective competitor.

If the ski fails the control, the assigned IBU referee for Ski Control will test the ski one more time with a second device to confirm the result. After confirmation of failing the test, information about the result will be provided to the affected team member and the TD/RD for appropriate disciplinary action in accordance with the rules. The skis will not be placed in the ski stand or ski holder, but marked and returned to the team.
A responsible member of each NF should wait near the station so that he/she will be informed immediately about a failed ski. In case no team member can be present, information will be forwarded by radio to TD or RD and then to the Team Coach at the shooting range.
The results of the tests are final and not subject to protest.
Test of the ski and ski transport must be conducted in such a way that no contamination occurs by the operators, volunteers or OC side.

**Additional test by ATR**
In case of suspicious results or for additional verification purposes, an ATR method will be applied as an official backup.

**Measuring procedure**

- 0-1 GREEN, move to next point, up to three points
- >1.0 RED continues to next point and remeasure in second device by IBU responsible person.

**Threshold zones**
Threshold zones are based on the current IBU/FIS calibration model for Alpha II and may change after it is updated. Information about changes will be officially announced before the intended implementation. The same limits apply before and after the race.

| Threshold zones | |
|---|---|
| 0-1 | >1,0 |

**Ski pick-up by Athlete before the race**
Skis will be picked up from the ski racks directly by athletes only (not by team staff/not handed over by officials) before the start when entering the start zone. Stored skis must be protected from the base side so that they cannot be touched or inspected by other than the competing Athletes.

**Single Mixed Relay**
In Single Mixed Relay Competitions, Athletes can only use one pair of skis. Rewaxing in between changes is not allowed.

**Ski Test after the race**
All or as many as possible skis will be tested by FTIR methods after each race according to ECR 4.2.3. The skis will be taken by the IBU official and/or the designated volunteers in the finish area and brought to the test station. At least one ski from each pair will be tested in 2 randomly chosen points on the ski base according to test procedure.
The skis can be picked up at the test station by the competitors or team member 15 minutes after the individual finish of the respective athlete, but not later than 20 minutes after the end of the competition.
The “venue contamination factor” (vcf) will be added if for the majority of the ski’s contamination is noticed. The “vcf” will be re-evaluated by the reference skis as defined below.

**Fluor Contamination risk/reference skis**
A separate set of skis will be designed for testing any possible fluor contamination (“venue contamination factor”) before and during competition days.
Data from post-race tests will be collected for research purposes and for possible decisions.

**Reserve Ski**
Reserve skis do not need to be tested before the race, in case they are used, they will be checked after the competition.

**Team sanctions**
An NF whose athletes have violated Annex A Art. 1.3 of the ECR (red ski) multiple times may receive fines or may even be suspended for one or more IBU competitions according to ECR 11.5.4 and 11.6

**Spot checks in wax cabins**
In order to permanently monitor which products are used for ski-preparation, IBU officials can carry out spot checks in the wax cabins where also ski and wax-samples are taken.

**NOTE:** *This protocol is subject to change and will be reviewed constantly with potential amendments as deemed necessary based on experience and developments during the season to ensure the fairness of IBU competitions. In case of amendments, such information will be shared actively with all involved stakeholders.*