

SUBJECT: ASTM F15.19 Methods for Measuring Re-Breathing Task Group

FY 23 OP PLAN ENTRY: Infant Bedding

DATE OF MEETING: 1/16/2024

LOCATION OF MEETING: Virtual

CPSC STAFF FILING MEETING LOG: Ashley Johnson (HSPP)

FILING DATE: 1/18/2024

CPSC ATTENDEE(S): Ashley Johnson (HSPP), Suad Wanna-Nakamura (HSPP), Tim Smith (ESHF), Daniel Taxier (ESME)

NON-CPSC ATTENDEE(S): Contact ASTM for the full attendee list

Summary of Meeting:

This Task Group (TG) is developing test methods to measure firmness, airflow, and carbon dioxide (CO₂) re-breathing for infant products.

The TG Chair began the meeting by explaining that the Standard Test Method for Firmness of Infant Products ballot is out for concurrent ballot, closing on January 18, 2024. The TG reviewed comments on the ballot, including two negative comments. TG discussion on the ballot included minor edits to section numbering and font sizing; comments on test method accuracy, validation, and reliability; and the rationale of the test method. The meeting participants agreed that one negative did not appear to be relevant to the test method, and the other negative was addressed editorially. The TG Chair will discuss with ASTM staff the appropriate process for addressing the negatives after the ballot closes.

The TG next discussed the Standard Test Method for Airflow Resistance of Infant Products ballot, which is out for subcommittee ballot, closing on January 22, 2024. The TG reviewed comments on the ballot, including one negative comment. TG discussion on the ballot included comments on the testing apparatus hemispherical head probe and testing apparatus tubing; comments on technical drawings and technical specifications; comments on application of this test method to products; comments on test method accuracy, validation, and reliability; and comments on the terminology, summary of test method, procedure, report, and keywords sections. The TG chair expects to resubmit the draft standard for concurrent ballot after addressing the comments.

The TG then discussed an ASTM Interlaboratory Study (ILS 1887, Work item 84613) that has been initiated for the Standard Test Method for Firmness of Infant Products. The objective of the ILS is to conduct a preliminary study to determine repeatability and reproducibility of the draft Test Method. Currently, the TG chair is working to identify participant laboratories, order/send samples, and finalize the test procedure. The test plan includes testing of three foam samples, each with a different expected level of firmness. Multiple parties will participate, including CPSC staff.

Last, the TG reviewed probe specifications for the hemispherical probe. The TG discussed best materials to use (wood vs a non-porous and potentially more durable material such as aluminum, stainless steel, or acrylic) and the technical drawings and technical specifications of the probe.

Next Steps:

The TG will continue discussing draft firmness, airflow, and CO₂ re-breathing test methodologies at the next meeting. The next TG meeting is expected to take place on February 13, 2023.